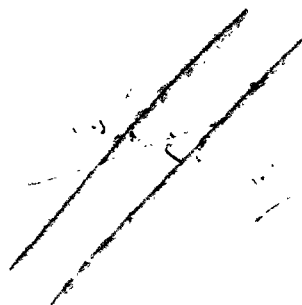


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MESOPOTAMIA
EXCAVATIONS ON SUMERIAN SITES

ALSO BY SETON LLOYD

SENNACHERIB'S AQUEDUCT AT
JERWAN

(with Thorkild Jacobsen)

Mesopotamia

EXCAVATIONS ON SUMERIAN SITES

by
SETON LLOYD

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PREFACE

EVER since 1918, when the end of the Great War brought a new Arab Government to Baghdad under a British Mandate, Iraq has been the scene of widespread archæological activity. As many as twenty-five different sites have been excavated by expeditions of five nationalities, always with important results, and the accumulated effect of this research has been to increase substantially our knowledge of the earliest chapters in the history of Mesopotamia, and therefore of the civilized world. The task of adequately summarizing these results, appraising the material evidence which has come to light and assembling it side by side with the historical conclusions to be derived from it, would be an extremely formidable one. In these few pages I have merely attempted to enumerate some of the accomplishments of the various groups of excavators concerned, without allowing the narrative to deteriorate into a catalogue of finds, and at the same time to convey some idea

of the nature and aim of the interesting work upon which they are engaged.

Thirty years ago the name Sumer would have conveyed nothing to the average person. To-day there is something called "the Sumerian Problem," which, for archæologists at least, is a source of constant speculation and controversy. Moreover, it constitutes to a large extent the subject of this book, since the significance of almost every archæological discovery in Mesopotamia varies according to the light which it throws upon the origin and history of the Sumerians. This, of course, applies mainly to the discoveries at sites which date from pre-Assyrian times. And I have found it necessary in the following chapters to confine myself to dealing with these sites only.

It is pre-eminently the work of the Joint Expedition of the British Museum and the Museum of the University of Pennsylvania which has been responsible in recent years for arousing popular interest in the early history of Mesopotamia. The magnificent finds at Ur in South Iraq have been thoroughly published, both in popular and scientific form, by Sir Leonard Woolley, and I have here accordingly attempted to concentrate upon those expeditions whose work is less generally

known, and upon antiquities which have not yet become familiar. Since, however, no work on the subject of early Mesopotamian civilization would be complete without continual reference to the Ur discoveries, I wish to make every acknowledgment to Sir Leonard Woolley, a certain amount of whose work it has proved necessary to recapitulate. To his name should be added that of Professor V. Gordon Childe, whose book on the *Most Ancient East* has proved an invaluable source of precise information.

I am further indebted to Dr. R. Campbell Thompson for permission to publish the magnificent and little-known bronze head found by him during the British Museum excavations at Nineveh, financed by Sir Charles Hyde, Bart., and now in the Iraq Museum; to Mr. M. E. L. Mallowen for a drawing of a painted vessel from Arpachiya; to the British Museum for photographs of various objects from Ur; to Professor Andrae, who has kindly allowed me to reproduce an architectural reconstruction of a temple at Warka; and to M. Christian Zervos for four beautiful photographs from his book *L'Art de Mésopotamie* in the edition "Cahiers d'Art."

Finally, my thanks are due to my friend and colleague, Dr. Henri Frankfort, for his

indispensable help, advice and encouragement, and to the Oriental Institute of the University of Chicago, of whose Iraq Expedition I am a member. The bulk of my illustrations and drawings are here reproduced with their kind permission, and it is my connection with them which has made this book possible.

SETON H. F. LLOYD

*Tell Asmar,
Iraq, 1936*

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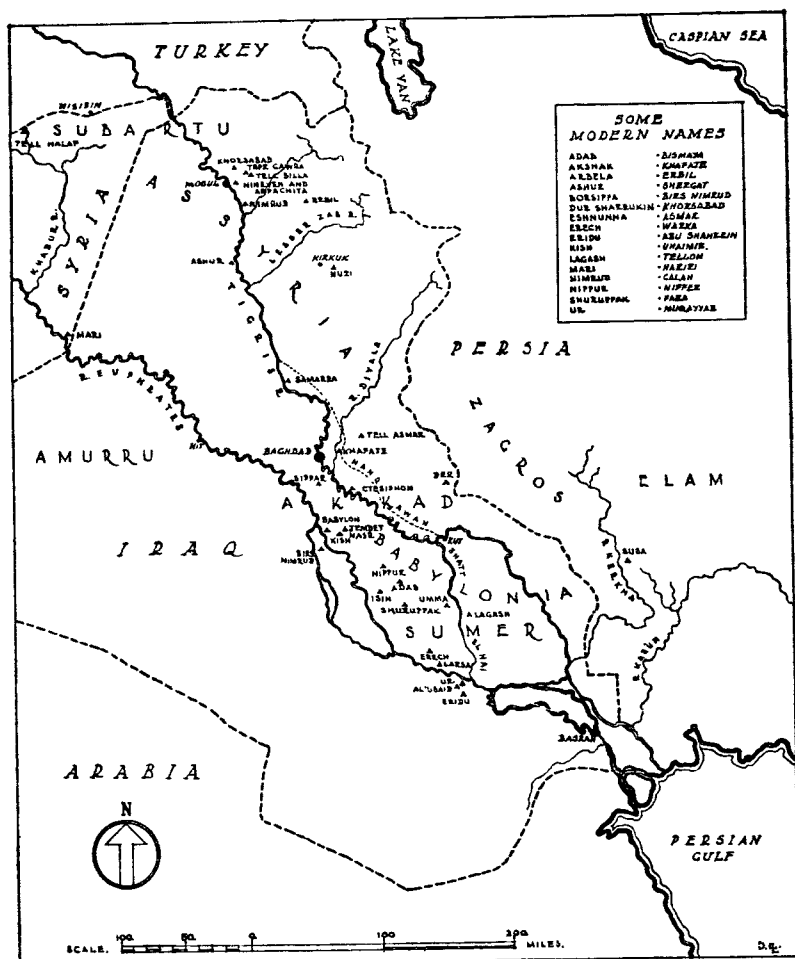
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I

DIGGING IN MESOPOTAMIA

THE name Mesopotamia, with its habitual associations, applies strictly only to the lower reaches of the Tigris and Euphrates. Both rivers have their sources high up among the mountains of Anatolia, and the Euphrates, passing diagonally across north Syria, has run well over half its course when it crosses the border into Iraq. Even then it is still separated from the Tigris by a considerable tract of desert, and it is not until a point is reached a little north of Baghdad that the two draw together and combine to irrigate the land which was once Babylonia. This point marks an important geographical dividing line, for to the north lies the country anciently called Assyria, which possesses climatic characteristics in marked contrast to the south.

Babylonia is economically dependent upon the rivers. The rainfall during an average winter is very unreliable and apt at times to be almost negligible, while the scorching heat



of the summer persists from March to October. The whole of the southern plain, like the delta of the Nile, consists of alluvium brought down and deposited by the rivers. It now stretches for many miles on either side of them, and produces a potentially fertile soil, but, unlike the Nile valley with its conveniently perennial floods, the waters of the Tigris and Euphrates need to be artificially distributed over the countryside. In a country of this sort wood as well as stone for building and other purposes must be imported from elsewhere. Date-palms will grow and certain shrubs, but other trees do not repay the water and labour necessary to irrigate them. Sun-dried brick, or for greater permanence the kiln-baked variety, will invariably be the material used for building. Arches and vaults will be used to avoid the necessity for roofing timbers. And above all, earthenware will have taken its primary place in everyday life, so that one form or another of pottery will be used for every conceivable domestic purpose.

In the north, partly owing to the proximity of the mountains, the winters are bitterly cold. Heavy frosts occur for three months in the year and rainstorms lasting sometimes from ten to fifteen days. Moreover, the land is traversed

by tributaries of the greater rivers, the two Zabs to the east and the Khabur to the west. Thus cereal cultivation is made possible without resorting to irrigation. Here the date-palm is out of its element, but vines and fruit-trees take its place. Also there is a supply of building stone and wood which can be obtained, without much difficulty, from the neighbouring foothills.

During the period since the War, excavations in Iraq have been mainly concentrated in the south. For here, long before the beginnings of written history, there was created a civilization now known as Sumerian, destined to dominate the history of the land for over three thousand years. More recently, however, as will be seen later, there has been an increase of archæological interest in the pre-Assyrian remains of the north; and whether these investigations reveal Sumerian colonies or collateral cultures within the sphere of Sumerian influence, certain discrepancies in the finds are easily explicable in view of the above considerations.

We must picture southern Mesopotamia, then, at the height of Sumerian prosperity as a flat plain traversed by a complex system of irrigation canals such as would do credit to a

modern engineer. During most of this period it was divided into a number of city-states, of which each in turn, and occasionally two at the same time, produced a dynasty of kings to hold nominal authority over the whole land. Each state's period of hegemony began and ended in war, and hardly a reign passed without inter-state quarrels, usually arising from irrigation disputes. Furthermore, the whole history of this epoch is punctuated by the raids, and occasionally the partial domination, of mountaineer races from the north and east, who cast covetous eyes upon the fertile lowlands. In this way city after city was sacked and destroyed, only to be rebuilt shortly afterwards. Sometimes this happened as often as twice in a generation, to judge from the results of excavations, and each time the town rose a little higher above the level of the plain. An example of the process carried to its logical conclusion may be seen in the town of Erbil, once called Arbela, which claims to be the oldest still-inhabited city in the world. Here in the course of time the building level has risen, until half of the modern Erbil is perched upon the crest of a mound a hundred feet high, covering the remains of innumerable earlier cities. The other half, since the population

has greatly increased, straggles away into the plain from its foot. So in antiquity each town would soon find itself standing upon a little hill.

Similarly, the canals continually needed to be enlarged or replaced, and each new one added to the already complicated network of irrigation works. In a land which depends upon artificial irrigation for its very existence, these canals become vital arteries. In addition to being the subject of continual inter-state quarrels in antiquity, their vulnerability in more modern times eventually led to the ruin of the entire land. This began in 1258 A.D. with the invasion of the Mongol hordes under Hulagu, and was later completed by Tartar and Ottoman Turks. It seems probable that it was not a process of wholesale destruction, caused by the deliberate breaching of canals and barrages, but rather a slow deterioration of the irrigation system for lack of proper upkeep and administration. The people were conquered and dispirited, and no longer possessed the individual energy or the requisite organization to maintain it. There was no longer anything to prevent a peasant from making a breach in the bank of a high-level canal and drawing off water to work his mill,

or from allowing the breach to enlarge itself beyond the limits of safety. Moreover, in the course of years the beds of the rivers themselves had sunk deep in the alluvium, and now ran between steep banks four or five metres beneath the level of the plain they used to irrigate. This necessitated the extra labour of pumping, where a barrage would no longer serve to divert the water into the canals.

Soon the breakdown of the system was complete, and was followed at once by the gradual desiccation of the country, so that to-day the cultivated portion of south Iraq consists mainly of strips of ploughland and palm-groves following the courses of the rivers. Here and there a modern canal has been dug, sometimes along the line of an ancient one. Such is the case of the Shatt-el-Hai (see Fig. 1), which is known to have been constructed by Entemena, Governor of Lagash, to bring water from the Tigris, owing to the constant interference of the neighbouring state of Umma with the water supply from the Euphrates. But the other great artificial waterways of Babylonian times, such as the Shatt-en-Nil and the Nahr-Awan, like their smaller tributaries, can now only be traced as a double row of mounds with a slightly raised or sunken

area between. Their great width is still impressive, and when crossing them in a car it seems as though minutes elapse between leaving one "bank" and arriving at the other.

With the canals no longer bringing water, the towns which were dependent upon them were abandoned. The action of wind and rain soon brought about the collapse of mud-brick buildings, and the effect of dust-storms, which increased in frequency as the cultivated land turned again to desert, ultimately converted what had once been prosperous cities into forgotten mounds. The rapidity with which this process of immolation seems to have taken place is remarkable. The sites of certain great cities were for one reason or another completely abandoned in antiquity, and within the space of a few years nothing remained but a group of brick-strewn mounds to bear witness to their one-time pomp and prosperity. In Assyria, for instance, King Sargon, like Akhenaten in Egypt, transplanted his capital from Nineveh to Khorsabad. Here he built a gigantic new city, square in plan and surrounded by a wall twenty metres high with seven great gateways. His palace was built upon a vast platform of sun-dried brick level with the tops of the walls, and included three separate temples and a

ziggurat tower. Yet when he died and, like the city of Akhenaten, the new capital was abandoned, his son Sennacherib did not even find it worth while to remove the innumerable sculptured reliefs with which the palace and the gateways of the town had been adorned; so that soon these became no more than a verbal tradition among the people of Nineveh, while fifteen miles away peasants grazed their flocks upon the slopes of a mound which had once been Sargon's palace and *ziggurat*. Nineveh itself was destined to suffer a similar fate; though at the height of its prosperity under Sennacherib it ranked as the greatest city in the world. Its actual extent has probably been exaggerated, and when Jonah spoke of "an exceeding great city of three days' journey," he was probably including Nimrud, twenty miles to the south, and Khorsabad, as suburbs of Nineveh. Diodorus says it had walls 100 feet high, with room for three chariots to drive abreast and there were 1500 towers 200 feet high. It is now established that at the time of Sennacherib the city had a circuit of $7\frac{1}{2}$ miles and fifteen gateways. A passage from a letter written by Sir Henry Layard when he was excavating Sennacherib's palace will give some idea of the scale on which it was con-

ceived. "In this magnificent edifice," he says, "I had opened no less than 71 halls, chambers and passages, whose walls had almost without exception been panelled with sculptured slabs of alabaster. By a rough calculation about 9880 feet, or nearly two miles of bas-reliefs, with 27 portals formed by colossal winged bulls and lion sphinxes . . ." This was Nineveh, which fell in 607 B.C., when the Medes took advantage of the flooding of the Euphrates to bring their battering-rams against the walls upon rafts. They razed every building to the ground and massacred the Assyrians so thoroughly that the entire city was abandoned. Less than 200 years later, Xenophon, in his celebrated retreat, passed over the sites of Nineveh and Khorsabad without even remarking their existence. And later, in 150 A.D., Lucian, living nearby in Syria, asserted "Nineveh has perished. No trace of it remains, and one would never know that it had existed."

This is the explanation of the mounds of Iraq and the *tells* with which modern archæologists are mainly concerned. They are often lower and less extensive than the ancient repute of the city which they cover would lead one to expect, owing to a gradual rise in the

07 2 15

level of the surrounding plain. Many traces of ancient occupation appear upon the surface—small objects of bronze or pottery, beads, cylinder seals and occasionally an inscribed tablet. But there are two most important elements in establishing the period to which a site belongs or even in connecting a group of mounds with the name of an ancient city already known to have existed, from references in texts, though not yet accurately located. These are the potsherds and the inscribed bricks. There is no need here to enlarge upon the archæological importance of pottery. It is sufficient to remember that in Egypt, for instance, such exhaustive studies have now been made of the historical development of ceramics, that it is usually only necessary to walk over a mound and observe the potsherds lying on the surface in order to date the ruins beneath. During the last few years this has almost come to apply equally to Iraq. The habit of stamping an inscription containing the name of a king and a short dedication upon every brick of an important building seems to have existed from the middle of the third millennium right down to Neo-Babylonian times. It can well be imagined what enormous value these inscriptions have for

archæologists in relation to the buildings in which they occur. Here, for instance, is a brick-stamp found during the first few days of excavating Tell Asmar, a previously unexplored mound near Baghdad:

“ Ibiq-Adad
Mighty King
Enlarger of Eshnunna
Shepherd of the black-headed people
Beloved of Tishpak
Son of Ibalpel.”

There in a moment one has the name of the ancient city: the name of a governor of the city and his father, and therefore the beginnings of a genealogical table; a reference to “black-headed people,” an epithet commonly used in connection with the Sumerians; and the name of the local deity. In this case it was similarly stamped bricks found on the surface which had enabled the mound to be identified as Eshnunna, a city state already known from extraneous evidence to have played an important part in the history of Mesopotamia at a certain period. There are, for instance, in the Louvre magnificent statues inscribed with the names of governors of Eshnunna. These were found by a French expedition

in Persia, whither they had apparently been carried as booty by the Elamites after a successful raid upon the cities of the plain.

Now, the bricks found on the surface at Tell Asmar afforded sufficient evidence to justify the concentration of an archæological expedition upon the site. And it only needed a single season's digging in the ruins of this one building to prove its assumed identity correct, and even to establish a complete chronological table of local governors. This was simply a matter of collecting the information provided by the stamped bricks, since each governor in turn seemed to have found it necessary to repair or completely rebuild the palace, and each had added his name and a new dedication upon the bricks. The neighbouring site of Khafaje, where digging was begun simultaneously, has only recently, after five years' systematic excavation, begun to be associated by scholars with the name of an ancient city, Akshak. This is because so far only that portion of the mound has been investigated which contains remains dating from a period before stamped bricks came into use.

In the case of the most important cities, the ruins of a *ziggurat* constitute a landmark which

can be seen for many miles around. On many of these larger sites enormous masses of brickwork are accessible directly below the surface of the mound, and since the baked bricks themselves are of excellent quality and usually well preserved, they prove something of a temptation to the modern Arab, who is perpetually in need of building materials. Sometimes, particularly in the case of the Assyrian sites in the north, limestone is available, and whether it appears in the form of foundation blocks or sculptured reliefs, it is equally serviceable for burning into cement or patching the wall of a house. In this way natives of modern Mosul in their search for limestone slabs were the true discoverers of the ruins of Nineveh, and the brick-robbers from Hillah were originally responsible for the identification of the mounds which covered Babylon. This type of pilfering greatly decreased with the advent of the first archæologists.

Half a dozen great names are inseparably connected with the early history of excavating in Mesopotamia. Rawlinson, Layard, Place, Botta, Koldewey and Loftus each in turn assisted in providing the nuclei of the great Assyrian and Babylonian collections of Europe. The conditions under which this older school

of archæologists worked, and their excavating methods, make an interesting contrast with the better subsidized, and consequently better equipped, digging expeditions which have taken the field since the War.

To-day efficient rail and motor services link Mosul and Baghdad with Basrah on the Persian Gulf. To a point north of Mosul on the Iraq-Syrian border one travels by wagon-lit on the unfinished Berlin-to-Baghdad railway. From Damascus one reaches Baghdad in something under twenty-four hours, crossing the 500 miles of Syrian desert in one of the great eighteen-wheeled coaches which are now used on that route. Or one lands at the Baghdad Aerodrome three days and two nights after leaving Croydon. But when Botta began digging at Nineveh in 1841, and a little later, in 1845, when Layard tackled Nimrud, both using Mosul as their base, it still required a journey of many weeks, mostly on horseback, to reach that town. Sir Wallis Budge had a Turkish inspector sent from Istanbul to supervise his work at Nineveh, and this gentleman, being unable to ride even a donkey, was compelled to travel almost the entire distance in a "takh tarawān," an elementary wooden litter swung on poles between a pair of mules.

As one might expect, he arrived more dead than alive.

In those days establishing one's claim to a new mound was rather on the principle of rival groups of colonists racing to plant their flags upon the shores of a new continent, and polite but spirited altercations were always taking place in connection with priority of claim to certain mounds. One such difference of opinion occurred when Layard conceived the idea of using some of the money given him by Stratford Canning to continue Botta's excavations at Nineveh. This was resented by the French consulate, who were sceptical of his claim to have obtained Botta's permission. In this case the argument must have reached a deadlock, for Budge describes how for some time "Layard continued to open trenches in the south side of the mound, and the French consul went on digging little pits a few feet deep in another direction." On a later occasion Layard's Chaldean assistant Rassam was anxious to attack the northern corner of the Kuyûnjik mound, but found the Frenchman Victor Place already at work. He was apparently undaunted, for "using strategy, he began to work there by night, and on the third night discovered the palace of Ashur-bâni-pal and

the splendid set of sculptures which form the 'Lion Hunt,' now in the British Museum."

It can be imagined that under these conditions the standard of excavating technique could not reach very great heights. In fact, in these very early days digging consisted mainly in the hurried looting of large semi-indestructible objects, such as sculptures in stone, and the preservation of such tablets or smaller objects as were not destroyed in the process. Moreover, once extracted from their mounds, the transport of these heavier finds to European museums presented a tremendous problem. As recently as 1929 a great winged bull was unearthed at Khorsabad, and though it was already broken into several pieces, it required all the resources of an American University to enable it to be transported by boat down the Tigris to Basrah, where a steamer waited to take it across the Atlantic. Actually nothing better than an old three-ton lorry could be found for the first stage of its journey, a distance of fifteen miles from Khorsabad to the Tigris; and as the largest fragment weighed over fourteen tons, it was hardly surprising that, having got to within 200 yards of the river, the engine collapsed under the strain. A series of cables were then

fixed to the remains of the chassis with the idea of dragging it the remaining distance by means of a donkey-engine on the paddle-boat. So firmly was the lorry stuck, however, that when the engine began to work, it was the boat which moved and began slowly to ascend the bank of the river. It had to be refloated before a second and more successful attempt could be made.

In the middle of the last century the only river craft suitable for work of this sort were rafts, known as *keleks*, supported on inflated skins. These are still used for the transport of grain, etc., down both rivers. An average raft consists of 300 to 500 skins, and is steered by a series of immensely long willow-pole oars. When it reaches its destination the skins are deflated, so that they may be packed on donkeys and carried back whence they came. The wooden framework is sold for firewood. Each of the great stone sculptures from Nineveh, Nimrud and Khorsabad would be laid in turn upon a mud-bank close to the river, and piece by piece one of these rafts would be constructed beneath it. After this it was a matter of waiting for the first flood to set it afloat; but when afloat it would be a fairly safe method of transport. Only once, in 1855, a catastrophe

occurred, at Kourna, where a raft was capsized and its load of Khorsabad bas-reliefs abandoned at the bottom of the Tigris.

In view of these difficulties, the number and size of the sculptures which came to view directly the Assyrian palaces were excavated proved disconcerting. Often it became necessary to leave them in place at the end of a season's digging for lack of transport facilities, and in this case it seemed advisable as far as possible to rebury them as a protection against the Arabs and Kurds, who are always on the look-out for limestone that can be used for burning into cement. Sometimes, however, this was impracticable owing to shortage of funds or shortage of time. In this manner many fine sculptures met an unworthy fate. Though only a small proportion of them had ever reached a museum, by 1891 there was only one winged bull left *in situ* at Kuyûnjik, the palace mound of Nineveh. A year later its head was removed and taken to mend a peasant's wall, and subsequently the whole monument was "sold for the sum of three and sixpence by the Vali of Mosul and burnt into lime by its purchaser."

Similarly with metal objects; in one room of the Khorsabad palace, Place unearthed nearly

160 tons of iron implements, including hoes and other agricultural tools. A few of these were sent home, and most of the remainder found their way into the Arab village at the foot of the palace mound, where for many years they continued to be used for the purpose for which they were made in the eighth century B.C.

The evolution during recent years of a proper system of scientific excavation and the preservation of antiquities has progressed rapidly. Excavating methods depend directly upon ancient building methods, and therefore vary according to the country in which one is working. Egypt has always been an excavator's paradise, first because so many monuments of first-rate importance are either built of stone or cut in the solid rock; secondly because in a climate where rain is hardly known most types of antiquity are found in a perfect state of preservation. At a site like Tell-el-Amarna, where the buildings are of sun-dried brick, or in some cases of stone, it is only necessary to rake away the accumulated sand and a quantity of easily distinguishable fallen brickwork; after which one has the ground plan with walls standing up to about a metre high. Sometimes, even, there are decorations on the

plaster with the colours as bright as on the day they were applied. Wood and ivory are preserved where white ants have not had access, and quite frequently cloth and wicker-work.

In Mesopotamia very different conditions prevail. Brick is the universal material, and, as we have seen, the sun-dried variety has been used from the fourth millennium onwards for almost every type of building from palace to a hovel. When these buildings are abandoned the roofs, constructed of mud upon poles and matting, are the first to collapse; then gradually the walls crumble, filling the rooms up to a certain height. Sometimes the site is not again occupied, in which case the ruin then becomes shaped to the curve of a mound. But more often old occupants return or new ones arrive and rebuild houses and temples, using as foundations the carefully levelled remains of the previous buildings. The continual repetition of this process produces an elaborate stratification, sometimes showing evidence of a succession of cultures lasting over a period of several thousands of years. For the archæologist this provides a fine source of historical information and material for scientific deduction, but it also makes his work enormously complicated in comparison, for instance,

with the Tell-el-Amarna type of site, which has been occupied only once. Added to this is the detrimental effect of heavy rainstorms in the winter, which gradually bring about the decay of almost every material except stone, metal and earthenware. There is also a tendency for standing walls and fallen rubbish to become welded together into such a homogeneous mass that only a practised eye can distinguish one from the other. Thus the craft of " wall-tracing " has gradually assumed a position of great importance among the various processes connected with excavating. It varies in its degree of technical difficulty from the gigantic walls of the Assyrian and late Babylonian palaces, whose faces often have a coating of plaster several centimetres thick, to those of the smaller buildings of the very early Sumerian periods. These are seldom plastered at all and have, in most cases, been buried beneath so many metres of superimposed later occupations that they are only with extreme difficulty distinguishable from the " room fillings " and surrounding debris.

Probably the first serious attempt at wall-tracing was made by Messrs. Place and Thomas, who patiently and systematically recorded the plan of Sargon's vast palace complex at Khorsa-

bad. Here the walls stood too high to make trenches practicable, and an elaborate system of tunnelling was resorted to. But together with other processes, wall-tracing only began to reach a proper standard of efficiency in 1899, when the German school of excavators under Koldewey and Andrae started work on the ruins of Babylon. By the time they turned their attention to Ashur their methodical accuracy in recording had become a byword, and their plan of campaign in investigating a mound had been reduced to a system which has only recently begun to be improved upon by their successors. Amongst the Germans the architectural functions of an excavator had become pre-eminent. The disentangling of ground-plans and possible reconstruction of the upper parts of buildings had assumed an importance which was possibly a reaction against the earlier method of excavating, which consisted, as we have already seen, mainly in looting objects without paying proper attention to the evidence provided by their context. There are those who think that the new tendency was unduly exaggerated at that period, since this method of excavating supplies a minimum of historical information. It is true that the tremendously extensive

excavations of the Deutsche Orient Gesellschaft at Babylon between 1899 and 1914 were concerned with a single period only, and produced few finds of primary importance beyond the magnificent glazed-brick portals of the Ishtar gate now in the Berlin Museum. Yet later at Ashur the same excavators were the first to follow the plan of a temple down through a most complicated succession of rebuildings to the remains of its original foundation in an extremely archaic period. The value of this system of excavations, and the importance of this particular piece of work, cannot be exaggerated, since it is a means of establishing a chronological sequence of cultures which can be checked on other sites. Also it suffers nothing from the meticulous care with which each successive plan, and in point of fact the position of every single brick, was noted and recorded.

These same excavators have maintained an equally high standard of efficiency during the post-war years at Warka, while in Sir Leonard Woolley's camp at Ur the technique of extracting valuable objects from the ground, preserving and interpreting them, and finally the artistry connected with their publication, reached a very high degree of accomplishment.

Each of these groups of excavators, however, has been in one way or another hampered by shortage of funds, and in this respect the larger American universities which have put expeditions into the field in recent years have been able to set a new standard. There can be no question that a body of archæologists when approaching an important piece of excavating will benefit by being properly constituted, so that each may have his appropriate work allotted to him according to his specialized training. And it is equally certain that no amount of scientific equipment or amenities of living for the excavators can do otherwise than enhance the standard of their work and increase their capacity for thoroughness. Published results speak for themselves, and the advantage of no longer needing to be deflected from one's original plan of campaign, in order to force sensational finds with a view to increasing one's next year's budget, is something which yearly becomes more obvious. The Oriental Institute of the University of Chicago now have camps of this type in Iraq, Syria, Palestine and Egypt. Each is carefully staffed with experts, and provided with photographic studios, scientific laboratories and even, in certain cases, a library. All these units co-

operate in collating their results, and there is a continual interchange of personnel among the various expeditions, so that individual workers become apprised of the wider scientific aims of the whole organization.

II

SOME SUMERIAN SITES

THE end of the third millennium B.C. was a period of great literary activity in Babylonia. A large group of scribes set themselves to chronicle the religious traditions and political history of the land; and though what little survives of their work comes to us for the most part second-hand from much later chronicles, mainly of the Assyrian and Greek periods, we have at least been provided with an interesting, though no more than schematic, list of kings divided into dynasties according to the temporary hegemony of the city in which they ruled. The beginning of the list is prefaced with the remark, "After the Flood came, kingship was sent down from on high," and any attempt that has been made to name kings who ruled before this traditional cataclysm becomes obviously involved with mythical heroes.

The later kings styled themselves "Lords of Sumer and Akkad." Lower Mesopotamia,

which is believed to have included both lands, is a delta reclaimed from the Persian Gulf, whose still-receding shores once reached a point some distance north of modern Baghdad. The names Sumer and Akkad were applied respectively to the southern and northern halves of this country, but may also be considered to have denoted two separate elements in the population of the whole. The Sumerians were at first predominant, and up to the middle of the third millennium the history of Mesopotamia is the history of the Sumerian nation, and its kings Sumerian kings. But at a certain point the Akkadian element among the people seems to have been augmented by an influx of new Semitic races from the northern steppes, and the land to have fallen under Akkadian domination. The first great Akkadian king whose exploits have been chronicled and who left an indelible mark upon the history of the two races was Sargon I, whose reign can be dated with a fair amount of certainty to 2550 B.C. A good deal of archæological research in recent years has been concerned with attempting to establish some sort of a chronology for the pre-Sargonid ages, and for this purpose some such date has been used as a basis. The preceding centuries as far

back as the earliest recorded dynasty are for convenience referred to as the "Early Dynastic" period; and from the excavator's point of view this period has the enormous advantage that its architectural remains are distinguished by the use of a particular cake-shaped type of brick now known as "plano-convex," whose introduction and disappearance coincide almost exactly with its beginning and end. Owing to the progress of this research, three distinct phases have now been distinguished in the period which intervened between the arrival of the earliest settlers in Sumer and the introduction of "kingship."

The early history of this archæological movement begins in the middle of last century with the direction of popular interest towards the pre-Babylonian remains of southern Mesopotamia. In the year 1849 Sir William Loftus was attached to a Perso-Turkish boundary commission, and in that capacity found himself involved in a somewhat leisurely journey from Mosul to Basrah. Before this journey was completed he had had time to take note of a number of the more obvious ancient sites, such as Nineveh, Babylon and Nippur, and had, in addition, been the first to suspect the important significance of two

separate groups of mounds known respectively by the Arab names of Tell-al-Muqayyar and Warka. The latter of these he discovered to be the remains of an ancient city of vast extent and great antiquity, standing on the east bank of an ancient course of the Euphrates. Here he returned the following year, and again in 1852-3 after the formation of the Assyrian Excavation Fund, and undertook a series of modest excavations which were eventually responsible for forming the kernel of the Babylonian collection in the British Museum.

Meanwhile, Mr. Taylor, the British consul in Basrah, had become interested in the other site, Tell-al-Muqayyar, "the mound of pitch," where the ruins of a great *ziggurat* reared up out of the plain about ten miles west of the modern course of the same river. Archaeological technique being then in its infancy, Taylor's method of approach was based on the hope of finding objects rather than noting their context or attempting to preserve any architectural features encountered in the process. He cut holes in the fabric of the *ziggurat* at the four corners, thereby irreparably damaging that extremely important monument: yet he succeeded in this way in extracting a number of inscribed cylinders used as

foundation deposits. These not only gave the names of kings who had built or improved the stage tower, but once and for all identified the site as Ur, called "of the Chaldees," the biblical home of Abraham. He also visited a neighbouring mound, Abu Shahrein, which later proved to be the remains of Eridu, a city "second only to Nippur in sanctity among the ancient cities of Sumer." His notes made during the course of these new investigations are thorough and conscientious, but enhanced only slightly by the quaint wood-engravings of the period, in which, as Dr. Hall reminds us, "the draughtsman, and then the engraver, had combined successively to deform the originally probably rather poor sketches of the actual observer."

But now public attention became focused on Nineveh. The more spectacular work of Layard and Rawlinson held the field, and with the colossal statuary and mighty buildings of the eighth century looming large in people's imagination, there were few to recognize the importance of this discovery of the most ancient culture of Mesopotamia. It remained for a French expedition under the leadership of de Sarzec to take possession in 1877 of a new site known as Telloh, on the east bank

of the Shatt-el-Hai, in the very centre of southern Babylonia. Here, among the ruins of the ancient Lagash, he worked intermittently for more than twenty years, finally making the Louvre the principal stronghold of the early Babylonian art which was beginning to be known as Sumerian. It is interesting to remember that in 1900 during his last season's digging, he discovered, without realizing their significance, sherds of two very early types of painted pottery, later to be associated with the names of Jemdet Nasr and Al'Ubaid. It was on the strength of these that thirty years later his work at Telloch was resumed by M. l'Abbé de Genouillac, who found them an incentive to investigate the lower levels of the mound, using the "sondage" method, recently so effective at Ur, and producing a quantity of evidence of early cultures, important mainly when considered in comparison with similar results from other sites.

De Sarzec's contemporary, Rassam, during his spasmodic attacks upon Birs Nimrud and Sippar, and Sir Wallis Budge's work at Deir, produced little beside great quantities of cuneiform tablets. Koldewey and his German colleagues worked consistently at Babylon from 1899 until the outbreak of the Great

War, but were concerned only with the neo-Babylonian period and remains of the sixth and seventh centuries B.C. But meanwhile the British Museum had never given up hope of completing the work begun by Taylor at Ur, and when the advent of British troops to Mesopotamia made conditions more favourable they began to plan a new archæological campaign. Little time was wasted after the Armistice, and in the winter of 1918 Mr. R. Campbell Thompson was sent to Tell-al-Muqayyar to reconnoitre. On the strength of his findings the British Museum was encouraged to put an expedition into the field, and under its auspices Dr. H. R. Hall proceeded to make excavations at Ur and the neighbouring site of Eridu. He also discovered a new mound known as Al'Ubaid about four miles west of Ur, where directly he began to dig he came upon the remains of amazing architectural decoration, forming part of a building obviously far more ancient than anything yet discovered in Mesopotamia. He had scarcely time to do more than guess at the richness of these finds when his season came to an end, and for the next three years no funds were available for digging. In 1922, however, Sir Leonard Woolley was able to return to Ur in

charge of a new expedition which was the joint enterprise of the British Museum and the University Museum of Pennsylvania, and his first thought was to continue the work at Al'Ubaid which Dr. Hall had been compelled to abandon at such an exciting stage. Thus the temple of Nin-Khursag came to be completely excavated, and its astonishing copper reliefs and inlaid ornaments, most of which had fallen from the façades, were carefully preserved and transported to various museums for restoration.

Its name and approximate date were given by a limestone foundation tablet, at that time the earliest known, which was found during this work. The inscription read: "A-anni-padda, king of Ur, son of Mes-anni-padda, has built a temple for Nin-Khursag." Now, Mes-anni-padda was already well known from king-lists and inscriptions found elsewhere to have been the first king of the first dynasty of kings of Ur. So that, presuming the tablet had been found in its original setting, here was a Sumerian building complete with all its architectural trappings which could be associated with the name of an historical character; in fact, with the second king of a particular dynasty holding sway over

the country from the neighbouring city of Ur.

Furthermore, adjoining the temple was a cemetery which could be considered to be contemporary with it, since its location was obviously due to the desire of the living to bury their dead as near as possible to the sacred precinct. And though little more than pottery was found when Sir Leonard Woolley investigated these graves, the information which the pots provided, when carefully drawn and collated, was later to prove an important asset to his expedition. For it can be readily understood that a collection of more than a hundred pot-shapes and information concerning the ware of which they are made, combined with the certainty that they all occur at one particular historic period, is invaluable to an archæologist when later he is faced, as was Woolley in the great Ur cemetery, with a succession of periods and a hopelessly confused stratification.

Meanwhile attention had been drawn to another part of the mound, owing to the totally distinctive quality of the sherds appearing on the surface. Here was a fine painted hand-made pottery (see Plate VI, *a*), later to be associated with the earliest of all the suc-

cessive Mesopotamian cultures, and by its affinities with the early ceramics of the Iranian highlands, to provide an important clue to the origin of the Sumerians. This little hill proved in fact to be the remains of a primitive settlement dating from the time when man first resorted to the marshes at the head of the Persian Gulf, in order to escape from the desert drought, and began to establish his home upon the flood-watered islands which gradually appeared among these reedy lagoons as the rivers brought down more silt and the coastline receded. Sir Leonard Woolley found traces of huts of mud upon frameworks of reeds and, in addition to the painted pottery already mentioned, implements of chipped and polished stone and all the evidence of a very simple culture. The accessibility of these remains and their good state of preservation were due to the site having never subsequently been occupied.

In 1926 Woolley returned to Tell-al-Muqayyar and set to work upon the great prehistoric cemetery of Ur. These graves were situated outside the city walls, and penetrated deep into the sloping layers of stratified rubbish which for countless preceding generations had been thrown out from above and accumulated

in the angle between the plain and the mound. Altogether about 1400 burials were found, evidently extending over a fairly long period of time, for they were superimposed one above the other, and often interpenetrated. This work eventually led to the discovery of the Royal Tombs, with their gruesome death-pits, which have made the site famous. With a view to dating, Woolley remarks that there were six or more superimposed common burials above these tombs and that "some time must have elapsed before the kings, buried as they were with such ghastly pomp, could be forgotten and the sanctity of the tomb-shafts invaded by the common dead." He therefore suggests 300 years as the period during which the cemetery was in use and, since the end of this period seems to coincide with the beginning of the First Dynasty, he would date the Royal Tombs about three centuries before Mes-anni-padda.

But the lowest graves proved not to have reached the bottom of the early rubbish-heaps, and it was with a view to supplementing the chronological evidence that he then proceeded to sink shafts beneath the bottom of the forty-foot pit which the excavation of the cemetery had produced. Pottery, small objects and

even inscriptions had continued to be more or less homogeneous in quality throughout the entire depth of the rubbish layer, but soon these ended and he encountered an eight-foot stratum of clean uniform clay with an obvious change in the nature of the pottery and other remains beneath. This he explained as the deposit left by a flood, and on the evidence of the break which it had apparently caused in the continuity of the local culture, he immediately associated it with the Flood of Sumerian legend and the Biblical story of Noah.

Beneath the clay stratum, and just before reaching virgin soil, Sir Leonard Woolley found himself among the remains of a primitive settlement corresponding in every detail to that which he had already investigated at Al'Ubaid. Here were the familiar painted pots and implements of flint and volcanic glass, unquestionably suggesting that this site also had been chosen as a home by a colony of early settlers. But at Al'Ubaid there was no clay deposit, nor was such a thing encountered when a pit was sunk in another part of the mound at Ur. Woolley explains this phenomenon by suggesting that the earliest settlement at Ur was placed upon a

little "knoll" out of reach of the flood, and that it was into this that the second pit penetrated. Yet together these facts make the theory of a Biblical flood less convincing. Furthermore, traces of similar floods appear upon other sites, often at an entirely different period in their history, and it is doubtful which if any of these may rightly be called *the* Flood. But the outstanding accomplishment of the trial shafts at Ur was to supplement the information already obtained at Al'Ubaid concerning the earliest of what will presently be seen to be the three great epochs of pre-dynastic history.

Our knowledge of the second of these is entirely due to the work of Dr. Julius Jordan at Warka, a site which, as we have already seen, had been dug for a brief period only in the middle of the last century and identified as the Biblical city of Erech. Hither the German scientists directed their attention when they returned to the field in 1927, and excavations have been conducted there every season since then with that meticulous thoroughness which has come to be associated with the Koldewey tradition.

Here again a "sondage" shaft was sunk down to virgin soil. In the lowest levels they

once more encountered the familiar greenish-painted pottery, which had by then come to be known as Al'Ubaid ware. But mixed with this, and superseding it in quantity as the level rose, was an entirely new ware which had only been found at Ur in the form of isolated sherds, a type alien to Mesopotamian ceramic tradition. This brick or plum-red pottery, mixed in its earlier stages with a grey variety, proved to be a fabric introduced by a fresh people who joined forces with the Al'Ubaid stock, and is now considered as characteristic of the "Uruk" period; the name "Uruk" being merely the Babylonian form of the Hebrew Erech used to designate the second epoch. But as excavations at Warka progressed it became clear that more was destined to be known about the life of this period than was possible in the case of the Al'Ubaid culture. After several seasons' work upon the *ziggurat* mound, Dr. Jordan and his colleagues had succeeded in extricating the remains of three superimposed temples. These were naturally not contemporary, but all belonged to the historical period which had become associated with the name of the site and was then particularly under observation. The earliest of the three became known as the

“White Temple,” the second as the “Limestone Temple” and the third as the “Red Temple.” All three are unique in that they apparently belong to the first period in the history of Mesopotamian culture at which any interest was taken in architectural form or adornment, and they will be described in a later chapter. Other important finds at Warka, both in the form of architecture and objects, belong to the succeeding periods, and are better mentioned in that context.

The last of the three periods which preceded the time when “kingship descended from heaven” and the semi-historical dynasties began is associated with the name of Jemdet Nasr, a site dug in 1926 by Dr. Ernest Mackay and Professor Langdon while their headquarters were at Kish. The work at Kish had begun in 1922, when Prof. Langdon, working for Oxford in co-operation with the Field Museum of Chicago, decided to attack this vast site. Situated about eight miles east of Babylon, it consists really of twin cities, Kish and Harsagkamma, separated by the ancient bed of the Euphrates. Its combined extent is something like five miles long by two miles wide, and apart from other ruins, contains the remains of no less than three *ziggurat*

towers. Of these the great stage-tower of the western city, called "Unir-Kidur-Mah," "House of Admiration, the far-famed abode," dated from the first Babylonian dynasty (about B.C. 2150), and is dedicated to the War-God Ilbaba and his consort Ishtar. The other two occupy the western end of the group of mounds called by the Arabs Ingharra, and form part of the more ancient city of Harsag-kamma. Both of these have a core of those plano-convex bricks which ceased to be used at the time of Sargon of Akkad and must, therefore, date from the earlier Sumerian dynasties.

In the spring of 1923 Dr. Mackay attacked the great western *ziggurat* and surrounding buildings, but in the following season turned his attention to a mound (called "A") south of Ingharra, where there were signs of a very early cemetery. These burials, proved by their contents to belong to a pre-Sargonic period, were apparently dug into the ruins of a great palace also built of plano-convex bricks. The stumps of the walls seem to have been visible when the cemetery was in use, since the graves take their direction from them, but some time must have elapsed after the building was abandoned before its ruined

chambers and corridors came to be used as a place of burial. The area provided Dr. Mackay with ample work during two digging seasons, and the palace, with its great outer courtyard, wide sweeps of alcoved walls, fine flights of stairs and imposing row of pillars, is still the most impressive secular building dating from the Early Dynastic period. Meanwhile Prof. Langdon had been excavating Mound "W" west of Ingharra, and come upon a fine library of cuneiform tablets beneath buildings of the neo-Babylonian period.

The fourth season, 1925-26, found him still occupied here, while Dr. Mackay embarked upon the task of excavating the principal Ingharra mounds which covered the great temple-complex of E-Harsagkalamma. But it ended unexpectedly with the discovery of Jemdet Nasr, a low *tell* eighteen miles northeast of Kish, where great quantities of a new and obviously important type of polychrome pottery appeared (see Plate VI, *b*) on the surface. Prof. Langdon dug for a short period there and then, but was hampered by the remoteness of the site and the shortage of water, and ended the season in a Baghdad hospital suffering from physical strain combined with fever. He had, however, by that time suc-

ceeded in making a number of extremely important deductions in connection with Jemdet Nasr, and these were confirmed by a second campaign there in 1928. The new painted pottery, which consists of rather elaborate lattice-work or checked patterns in black and yellow upon a deep red ground, obviously characterized a distinctive phase in the cultural history of the country. Later, as has been said, it was possible to place it chronologically between the Uruk period and the rise of the semi-historical dynasties and, for want of a better term, it was designated by the name of the site where it first appeared in any quantity. For the great importance of Jemdet Nasr lay in the fact that the site had apparently been destroyed by fire about the middle of the fourth millennium and, like Al'Ubaid, never re-occupied. All the antiquities were therefore of the same date, and the whole paraphernalia of life at this particular period, including an early form of pictographic script found upon tablets, could be safely associated with its distinctive polychrome pottery. Furthermore, square-edged bricks of the modern type were used here and, as it was already known that the plano-convex type were employed exclusively in very earliest dynastic periods, it

became plain that the fire which destroyed Jemdet Nasr was the symbol of some great ethnic upheaval precluding a new historical epoch.

Meanwhile the task of excavating the Ingharra mound at Kish was to be continued. The same expedition had again taken the field, this time under the leadership of the late M. Louis Charles Watelin. He started work on a large scale with the gigantic Babylonian temple begun by Nebuchadnezzar in the sixth century B.C., and completed by Nabonidus, whose son-in-law, Belshazzar, saw the handwriting on the wall, as related in the Book of Daniel. The walls of this building were left standing to a very considerable height and in one place even a section of the cornice remained intact. Having taken note of this, and all other details necessary for a later architectural reconstruction, and after completely planning the building, M. Watelin turned his attention to the lower strata of the mound. His suspicion that earlier versions of the same building must exist beneath the Neo-Babylonian structure were soon confirmed, for he was able to identify successively the walls of similar buildings dating from the Larsa period and from the time of Sargon

of Akkad. In his second season he determined to go deeper still, and accordingly proceeded to excavate an area ("Y") at the foot of the mound due south of the Nabonidus temple. This eventually developed into a search-pit, which reached water level forty-five feet below the pavement of the neo-Babylonian temple, and a small shaft struck virgin soil fifteen feet deeper.

One of the first interesting discoveries, made six feet beneath the Sargonid building, was a layer averaging five feet deep consisting of red earth or possibly fragments of sun-dried brick extending over the entire area. This has been variously interpreted as the result of a flooding of the Euphrates which razed all the buildings then existing to the ground or, alternatively, as part of a *temenos* platform upon which stood the whole of a great temple complex dating, perhaps, from the powerful fourth dynasty of Kish and including the two neighbouring *ziggurats*. In any case, a fine lapis cylinder seal found in this layer bears an inscription which suggests that it is contemporary with the "A" palace beneath the cemetery for which Prof. Langdon suggests 3200 B.C. as a date, but which is now generally considered to be some hundreds of years

later. Thirty feet beneath the Nabonidus temple in this pit M. Watelin made the most important archæological discovery of the whole campaign. It took the form of a series of vaulted brick tombs which proved to be rich in objects and information, and included in more than one case the remains of chariots with the skeletons of oxen still between the shafts. This suggested a parallel with the death-pits of Ur, where human sacrifice apparently formed part of the funerary ritual of an important personage and, indeed, one tomb contained the skeletons of at least four "attendants." The tombs themselves, however, were notably built of plano-convex bricks and, though obviously preceding the "red stratum" by several hundred years, must still belong to the Early Dynastic period. It was not until after water-level had been reached that the now-familiar polychrome pottery began to appear together with other indications of having reached the Jemdet Nasr period. These persisted as far as virgin soil, leading one to conclude that Kish was founded at the beginning of the Jemdet Nasr epoch.

These three great excavating enterprises at Ur, Warka and Kish still being in full swing,

and having their experience and results to profit by, the Oriental Institute of Chicago University put a large expedition into the field, with Dr. Henri Frankfort as director. In 1930 they were able to start simultaneous operations on two adjoining sites in the vicinity of Baghdad, Tell Asmar, which was already known to be the site of the ancient city of Eshnunna, and Khafaje, now fairly certainly identified as the ancient Akshak.

When an expedition starts work on a completely new site it can only benefit to a limited extent by the experience of its contemporaries and predecessors in other parts of the field, and must evolve methods of its own appropriate to local conditions. Also native workmen must be trained, since the success of this type of excavating depends largely upon the skill of a nucleus of trained pickmen and knife-men. At Tell Asmar two seasons' work on a group of post-Sargonid public buildings served to initiate both staff and Arab diggers into the peculiar subtleties of the work. For here were the remains of seven building periods superimposed one above the other, and eventually seven complete ground plans were disentangled, each differing to some extent from the previous one. In

subsequent seasons this experience proved invaluable, particularly in view of the complicated stratification which characterized the remains of earlier periods.

Two adjoining sections of Tell Asmar were tackled in the third season. One of these proved to be a group of private houses of the Akkadian period which, like other buildings on the site, had been repeatedly destroyed and rebuilt, so that several versions of their planning could be traced one beneath the other. They provided one with a picture of town life 4500 years ago which corresponded in almost every detail to that of the modern Arab village: one house remained standing high enough for the arches over the doorways and the small grilled windows to be intact, and one would only have needed to re-roof it to make it a habitable Arab home, complete with bread-ovens, hearths, pottery and other household utensils. The street outside was indistinguishable from any of the meaner streets of Baghdad. The time and labour spent in excavating these houses down to a point where they began to be built of plano-convex bricks instead of the square-edged Akkadian type were amply repaid, if only by a magnificent collection of cylinder seals which

gradually accumulated. For the glyptic art of this period had reached such a stage of perfection that the little pictures produced when these seals are rolled upon plasticine, the tiny friezes of stylized animals and mythical emblems, show a faculty for design in miniature never rivalled before or since.

In the second area the presence of a much larger building had been detected. This also proved to be a secular edifice dating from Akkadian times, but the rooms were so well appointed and the whole plan conceived on such a commodious scale that there seemed no alternative to identifying it as the palace of a local ruler (see Fig. 2). Every room, or group of rooms, had its own notable characteristics, which in most cases gave a clue to its original function, and a great variety of pottery and other domestic articles were found in them. The palace was built of rectangular square-edged bricks, and it was not until it was decided to go deeper that walls were found directly beneath built of plano-convex bricks. Hidden in one of these was a great earthenware cask, entirely filled with copper vessels, corresponding in the minutest detail to similar vessels of gold and silver found at Ur in the tombs of Shubad

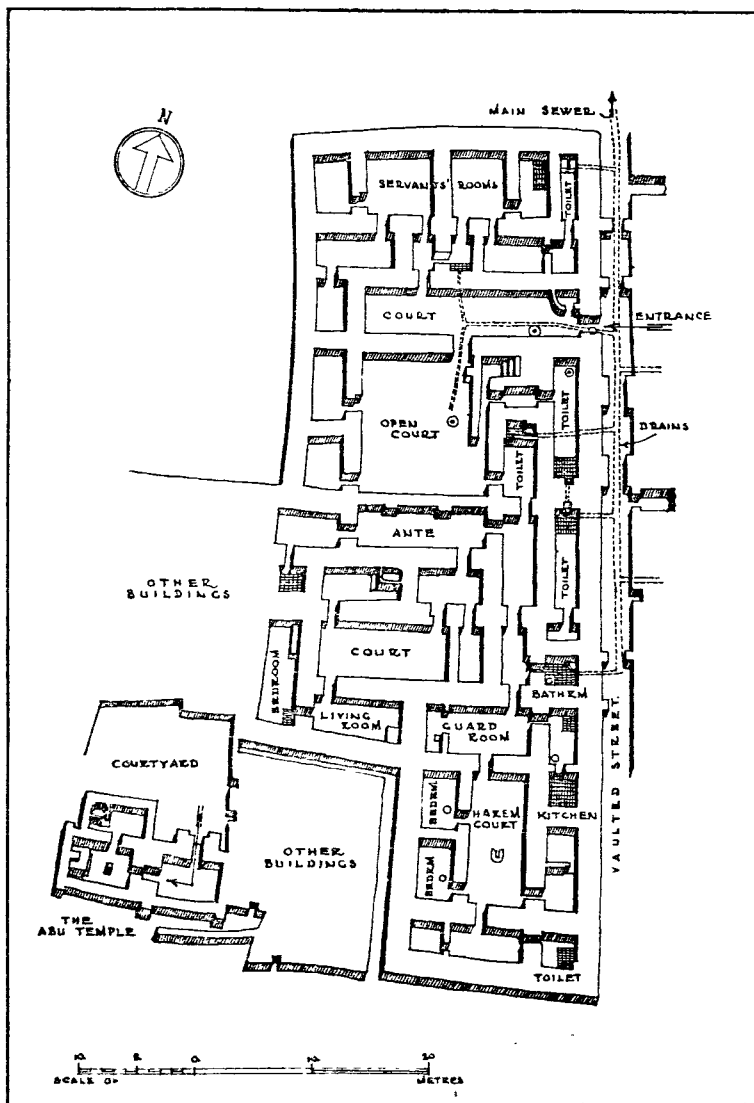


FIG. 2.—Plan of the Akkadian Palace at Tell Asmar.

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and Meskalamdug. The inscriptions upon some proved them to be part of a ritual "service" used in an adjoining temple dedicated to Abu, the Lord of Vegetation. This little building (see Fig. 3, c) soon came to light in the angle made by the L-shaped plan of the palace (see Fig. 2), and was destined to occupy the attention of the expedition for three seasons.

The work of tracing one version after another of its plan from the surface of the *tell* down to where the first tiny shrine was originally founded forty feet below it and only a few inches above virgin soil, was the type of stratified digging whose results have only recently been deemed worth the work involved. Twenty-five times the Abu-temple had been rebuilt, and three times a complete change of plan and orientation had taken place. Although a certain amount of polychrome pottery had come to light in the intermediate stages, it was not until the earliest and most primitive shrine appeared that Dr. Frankfort was able to be certain that the Jemdet Nasr culture had been reached. For here the plano-convex bricks, which had persisted ever since their penetration beneath the Akkadian foundations on the surface, gave way to a more

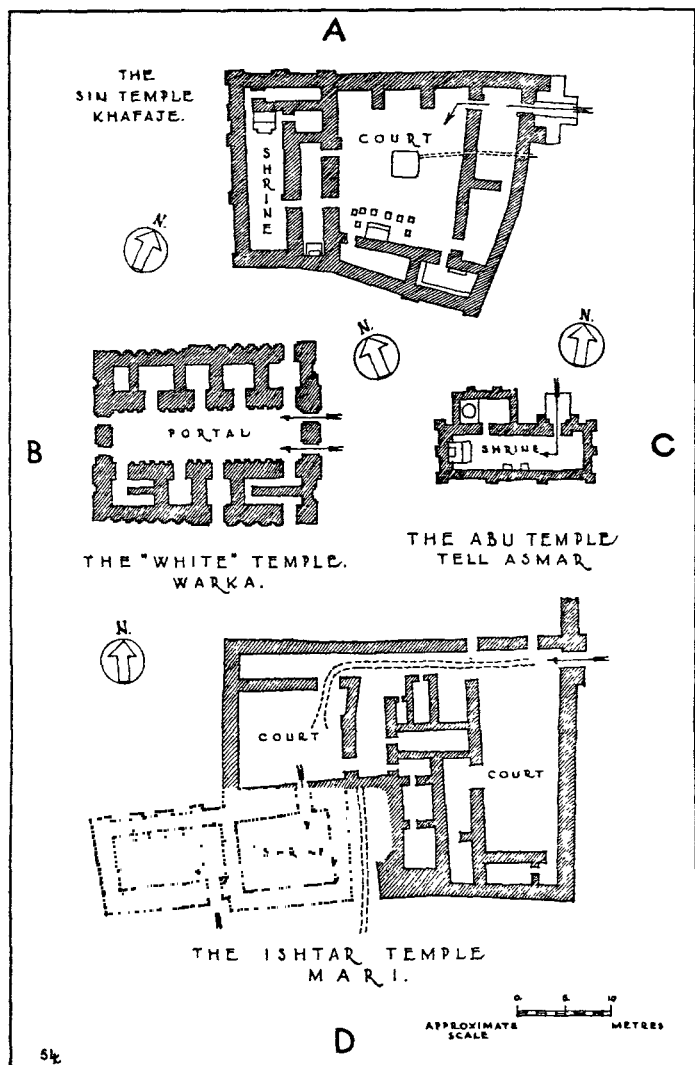


FIG. 3.—Plans of four very early temples.

(It should be noted that the plan of the Warka temple suggests a gateway for the reception of the god when he descends upon the summit of the *ziggurat*, whereas the remaining three are rather residences.)

rectangular prismatic brick such as have been found in pre-dynastic buildings elsewhere. Beneath this there ceased to be any trace of walls, and the discovery of virgin soil after penetrating a few feet of rubbish suggested that the site, like that of Kish, was first occupied in Jemdet Nasr times. This conclusion was borne out by two "sondage" pits, one beneath the private houses and another below the palace, which were used to cross-check the stratification.

If every rebuilding of the Abu temple be taken to represent the lapse of a generation, a fairly considerable number of centuries may be attributed to the Early Dynastic period, and a great deal more was learnt about it from these excavations. Dr. Frankfort was able to detect three distinct subdivisions marked, apparently, by the two later changes of plan in the temple. The later of these may correspond to the period of the Royal Tombs at Ur, whereas the remarkable cache of statuary found at the fifteenth level of the Abu temple, to be described later, must be associated with the middle phase.

Meanwhile the party working at Khafaje, twenty miles away, had encountered buildings ranging over very much the same periods.

Here, right on the surface, were the remains of a great fortified temple enclosure (see Plate IV) built of sun-dried plano-convex bricks, but the vast buttressed enclosure wall which surrounded the entire *temenos* remained standing in some places to no more than the height of a single course of bricks, and only the outline of the great rectangular platform upon which the temple itself had stood could be traced in the centre of "The Oval." Even to accomplish this much it proved necessary laboriously to articulate each single mud brick, sometimes using a jet of compressed air when the work became too delicate for the point of a knife. Considering the unique character and extreme antiquity of the building, anyone looking at the architectural reconstruction which was the outcome of this work will agree that the means were justified.

A large private house built up against the walls at the north-west corner produced many interesting finds; while a walled quarter to the east, where a number of small dwellings were laid out somewhat formally with narrow lanes between them, had probably the function of a cathedral close.

Next, the main mound to the north was attacked and here again great patience and

skill were required for a new reason, namely, that it proved to be completely honeycombed with the trenches and tunnels of illicit diggers. Partly owing to its proximity to Baghdad, the site had proved a happy hunting-ground for the antiquity dealers in the years preceding Dr. Frankfort's concession. And it seemed that at times they had had considerable gangs of Arabs at work digging ruthlessly into the *tell*, destroying everything but the less fragile antiquities which they could tear out regardless of their setting and smuggle into the Baghdad bazaar. In spite of this the fragments of walls which remained were eventually pieced together into the plan of an imposing temple dedicated to the moon-god "Sin." This temple had evidently been sacked and its contents destroyed, for amongst the ruins lay the charred and broken fragments of over 150 limestone and diorite statues. Heads, bodies, arms and legs were scattered in mad disorder and, even when combined with the equally large number of fragments which had already found their way to Baghdad, comparatively few complete statues could be composed. There was, however, an abundance of small objects which had come off more lightly, carved stone amulets, bronzes and

pottery. Generally speaking, the clearing-out of the temple proved a productive piece of work.

It is imperative at this point to mention Tell Hariri, a site far up the Euphrates beyond the Iraq-Syrian frontier. For the ancient city of Mari, with which it is identified, appears at one time to have been an important outpost of Sumer, and for a short period to have assumed control of the whole country. At the close of the season 1933-4, which at Tell Asmar and Khafaje had produced such a surprising abundance of Early Dynastic sculpture, Dr. Frankfort paid a visit to Tell Hariri, where M. André Parrot was in the middle of a successful third season's digging. Here he found himself confronted with exact replicas of most of the antiquities he had recently seen unearthed at Khafaje, 250 miles away in the south. So striking was the similarity of style and material, particularly in the case of the statues, that he was at once able to align the Ishtar temple of Mari in which M. Parrot had found them with the Khafaje "Oval," and attribute it to a later subdivision of the Early Dynastic period. At the same time, it was a temptation to recall that in the king-lists the dynasties of Mari (Tell Hariri) and

Akshak (Khafaje) occur within a few years of each other, being separated only by the reign of the fabulous queen Ku-Bau at Kish, and to suggest that their hegemony was perhaps contemporary.

The most notable discrepancy between the two sites was the complete absence at Tell Hariri of plano-convex bricks. It is, however, generally agreed that the shape must have been introduced in the south by a race of mountaineers accustomed to building in stone, and it can only be supposed that these newcomers never reached as far north as Mari, having been absorbed by the population of Lower Mesopotamia.

To go further in cataloguing the excavations which have taken place in Southern Iraq in recent years would be to risk becoming tedious. Work, for instance, at Fara, where Dr. Eric Schmidt made a productive "sondage" supplementing the information obtained from the earlier "search trenches" of the Germans, or Banks's excavations at Bismaya upon the site of the ancient city of Adab, have mainly served to confirm the elaborate theories based on discoveries at other sites.

III

PRIMITIVE CULTURES AND ORIGINS

IN the Old Stone Age, as we have already seen, the head of the Persian Gulf extended as far as a point some way north of modern Baghdad where the Tigris and Euphrates run nearest together. Far down in the south a third river, the Karun, coming from the Persian mountains, discharged into the sea, bringing down with it as much silt as the other two combined, and at a point precisely opposite on the other side of the Gulf a fourth did the same. These two threw salients of mud out into the sea, which eventually met and formed a bar across the Gulf. With the scouring action of the tide no longer effective, the silt from the two larger rivers began to fill up the area north of this bar until it turned from sea to lagoon and from lagoon to marsh-land. Then gradually the marshes dried, and where once had been salt water there soon appeared a vast tract of rich alluvial soil. The land of Shumeri, or Sumer, now Lower Mesopotamia,

may be said in this way to have emerged from the sea at a time when a pluvial period in the Near East was rapidly giving way to a new arid régime, and many neighbouring countries were becoming less and less habitable.

Several races, therefore, converged upon the new land, and it became the birthplace of that peculiar civilization which dominated the whole of the valley of the two rivers for three millennia and which we have learnt to call Sumerian. From the Jebel Sinjar to the north-west and the Upper Euphrates valley came a Semitic people called Martu or Amurru, much later known as the Amorites, to colonize Akkad and the country as far south as Sippar. Here they forestalled a blond race from the north-east, who consequently never penetrated farther than the ancient shores of the Gulf, but settled in the land that was to become Assyria. Finally, from the desert to the west the ancestors of the modern Bedouins came exploring, but found the choicest part of the new land already occupied. Here was a race who had descended from the mountains of Elam directly the delta became at all habitable: the Sumerians, or "black-headed" people of the texts. They were of non-Semitic stock, though Sir Arthur Keith goes so far as to say: "There

cannot be any doubt that if they were living to-day we should call them Arabs." They had brought with them a simple but characteristic culture with certain elements suggesting antecedents in mountainous country. They appeared, however, to have found no difficulty in adapting themselves to the life of marsh-dwellers.

We have enumerated in the previous chapter what are now the three accepted stages in the early history of these settlers after their establishment in Lower Mesopotamia. But it is only right at this point to mention that until recently it has remained a subject for controversy whether the term Sumerian can already be applied to the first arrivals, or whether they were not representative of some other race who were supplanted by the "black-headed" people at the beginning of the second or "Uruk" period. In 1932 Dr. Frankfort submitted this problem to a careful scrutiny in the light of every scrap of available evidence, and in the paper on the subject which he was then able to produce he proved to his own satisfaction and that of the majority of his archæological colleagues that the former was the case. This he did by taking the cultural features which characterize the Sumerians of

the Dynastic period and detecting as many as possible of them first in the "Jemdet Nasr" phase, then in the "Uruk" and finally in the "Al'Ubaid." There was, of course, little difficulty in the case of the two former, and when regarding the last it was equally hard not to be impressed by the element of continuity, which he was able to trace back to the earliest Al'Ubaid village and to identify as distinctive traits of Sumerian civilization.

We may now, therefore, accept his view and examine the successive stages in the story of a single race in the light of the accumulated remains at various sites, and begin always from virgin soil.

At the time of the Al'Ubaid settlement architecture was in its infancy and houses were built of a framework of reeds plastered with mud. But the construction was ingenious, and (to judge by the reed buildings which appear to-day in the marsh-land of southern Iraq and which must be the exact modern equivalent) capable of an impressive effect. Upright members were composed of tall bundles of reeds, the tops of each opposite pair being arched over to meet one another and tied together. The spaces between these were filled with reed mats covered outside with
















T H E S I T E S										32 DELT
		AL'UBAID	UR	WARKA	KISH	TELL ASMAR & HARFA		NINEVEH & ARBACHAYA	TEPE GAWRA	OTHER SITES
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	JEMDET NASR	GRAVES CARVING OF WILD BOAR	JEMDET NASR PAINTED POTTERY CARVING OF WILD BOAR	GRAVES WITH PAINTED POTTERY STONE VASE WITH CARVED RELIEFS	JEMDET NASR PAINTED POTTERY RICH SOIL	JEMDET NASR PAINTED POTTERY RICH SOIL TELL ANMARI	  	PAINTED POTTERY CHALCITE & LUNDED SEALS	PAINTED POTTERY BURNT RECTANGULAR BRICKS	NORTH SYRIAN SITES EG. WARDENISH
	URUK	GRAVES	RED OR UBA POTTERY CEMENT BRICKS FLOOD	RED TEMPLE TABLETS WESTERN TEMPLE S. G. RECTANGULAR BRICKS "WHITE" TEMPLE EARLIEST SEAL RED OR GRAY POTTERY		URUK POTTERY RICH SOIL ANAPATTE	   	GRAY & BLACK POTTERY FLOOD	NOT EXPLORED FURTHER	TELL HALAF ANATOLIAN SITES EG. SANDE CRUIZ
	AL UBAID	AL UBAID PAINTED POTTERY PLANTS CRISTAL OBSIDIAN ETC FLOOD THE MARSHES	AL UBAID PAINTED POTTERY FLINTS ETC FLOOD THE MARSHES	AL UBAID PAINTED POTTERY FLINTS ETC FLOOD THE MARSHES			   	TELL HALAF AL UBAID SAMARZA PLAIN-CONVEX WARE FLOOD VIRGIN SOIL		SAMARZA SUSA [II]
		VIRGIN SOIL	VIRGIN SOIL	VIRGIN SOIL				VIRGIN SOIL		

FIG. 4.—A stratigraphical diagram of the principal sites now excavated in Mesopotamia.
(The vertical columns start at the end of the Early Dynastic period and read downwards through the various phases of Sumerian history, to virgin soil.)

clay and bitumen, while inside a wall of "pisé" might be built against the reed framework. Prof. Andrae has suggested that the type of façade thus produced, consisting of projecting reed-bundles and recessed panels of matting alternately, was the origin of the "buttress and curtain" treatment which was to become the most characteristic feature of Sumerian, Babylonian and Assyrian architecture. Doors already consisted of a wooden framework pivoting upon a stone in the ground, with a hollow cut in the top. The houses were built upon a platform of reed, perhaps in a low-lying area, since such ground as was already dry must have been used for cultivation. Yet the available high ground must have been rapidly increasing in extent, for we find the inhabitants of the settlement already cultivating cereals which will not grow in swamps or artificially irrigated desert. For this purpose they tilled the earth with hoes of flaked chert and reaped their grain with a sickle made of clay or wood in which were set serrated flakes of flint. Since these sickles were shaped like an animal's jawbone, the idea was very likely derived from that source. The game of the marshes was hunted with slings or clubbed with a pear-shaped stone

“macehead” pierced and mounted on the end of a stout stick. Flint arrow-heads are found only rarely. Boats were used on the lagoons of a type, with high prow and stern, still seen in Iraq, and ring-shaped weights of clay suggest that fish were netted. Stone axeheads of the type which were notched into a wooden shaft were found, and even a few examples of the shaft-hole type. These are rare in Mesopotamia, and seem likely to be imitations of a metal original, for the Al’Ubaid culture dates from the Chalkolithic age, and there is every indication that copper, though obtainable only in small quantities, was in fairly general use and could be cast in an open mould.

Spindle whorls and bone needles are evidence of a knowledge of textiles and sewing, but what little we know of the personal appearance and dress of this period is derived from clay figurines. Those found at Warka portray men with long beards, no moustache and hair in a “bun,” a type which is familiar all through Sumerian history and in pre-Aryan India. Their dress is uncertain, but the silhouette suggests a sheepskin garment still common in Iraq. Female figurines were found at Ur, but these obviously served some ritual pur-

pose, and are stylized accordingly. If we may judge at all from these sinister little people with their lizard faces and bitumen wigs, women apparently went naked and were probably tattooed. Only the graves give some evidence of the ornaments they wore. They were buried at full length, sometimes upon a bed of potsherds, and among the bones were found necklets, armlets and tiny studs of rock-crystal or obsidian which they must have worn in the nostril like modern Arab women.

The pottery, which has already been referred to, consisted of a simple and rather beautiful, pale greenish ware, hand-made or turned on a slow wheel (see Plate VI, *a*). There are tumblers, dishes, chalices and little squat pots with lugs on the shoulders. But above all there is a predominance of the spouted jar which is most distinctive of Mesopotamian ceramics in later times. Some early types have a roughly incised ornament, but for the most part designs of a free geometric style are painted on in black with a soft brush. Representations of recognizable objects do not occur.

In the Uruk period architecture came into its own. Bricks were now used, and for the first time we find evidence of a building method

which introduces the principle of the *ziggurat*. For these early inhabitants of Erech raised their first temple upon an artificial "mountain" composed of lumps of mud, already with battered and buttressed sides and decorated with pottery beakers in rows, stuck into the mud while still wet. On top was the White Temple (see Fig. 3), a shrine whose longest dimension was twenty-two metres, built of large square-edged mud-bricks and whitewashed—a little court surrounded by inter-communicating chambers and furnished with a stairway for the god to descend, since the Sumerian cult prescribed that the summit of this artificial mountain was his point of contact with the earth and here he would be manifested to his worshippers. This was the "holy of holies," and traces were found of a second temple to which the public would have access at the base of the *ziggurat*. Later the whole structure was encased in a bigger and better *ziggurat* which entirely covered the White Temple; and at the same time the oldest surviving version of the shrine of E-anna was built with walls resting upon a foundation of limestone blocks. The "Limestone Temple" was in its turn replaced by the "Red Temple," an extremely imposing complex of buildings

considering the immensely early period from which they date. Let us follow Prof. Childe's description as he saw it in the process of excavation. "At one end (of the central court) on a high terrace, reached by flights of steps, stood a colonnade formed by at least four pairs of cylindrical brick columns, each about 8 feet in diameter. The colonnade constituted a sort of Sublime Porte and led on the right through a monumental door to what may have been the main sanctuary. The outer wall was relieved by half columns and buttresses. And this wall as well as the retaining-wall of the terrace and the column standing thereon was gorgeously decorated with mosaics of red, black, and white clay cones stuck in the mud facing of the brickwork (see Plate V). The patterns, the constituent elements of which go back to the Al'Ubaid phase, may have been derived from those plaited in the reed mats hung on the walls; those on the pillars show that the latter are just magnified translations into brickwork of palm-stems: The internal walls of the temple were decorated with bas-reliefs in mud-plaster—a gnu with his mane denoted by spiral curls, bulls and reed huts or stalls, all elements suggesting a popular old Sumerian theme. . . ."

Clay nails with flower-shaped heads were driven into the walls to augment the frieze decoration.

A large section of the mosaic ornament in the "Sublime Porte" was cleverly preserved and reconstructed by Dr. Jordan in the Baghdad Museum; while an extremely accomplished representation of it in water-colour was made by Herr Koenig and has recently appeared as a fine colour-plate in Sir Leonard Woolley's new publication on Sumerian art. The little clay cones are shaped like rifle cartridges. Their flat ends were dipped in a brightish pigment and allowed to dry before being stuck in the mud-facing of the wall. The tiny triangles of mud which remain exposed between them cause the general tone to be a little subdued, and this fact, in conjunction with the texture produced by the mosaic, gives a very beautiful quality to the whole decorative treatment.

Two other important innovations occur in the Uruk period, and the first traces of both were found in the White Temple. One was the cylinder seal which for thousands of years to come each illiterate Sumerian was to carry, probably on a string round his neck, and use for every purpose from signing a document to

establishing his ownership of a jar of wine. The earliest known form of seal was merely a section of reed upon which certain signs were scratched, but here in the White Temple was found the impression of a stone cylinder made for the purpose, a symbol of the earliest recognition of the principles of property and personality. Furthermore, the impression was made upon a tablet of gypsum (see Fig. 4), already inscribed with figures, which foreshadowed the invention of writing. The first evidence of an actual script was found in the Red Temple upon tablets which apparently formed part of the temple accounts. The writing is crudely pictographic, and each ideogram a simplified representation of an object.

Seal-impressions when they occur here already show a much-improved standard of engraving. There are spirited designs consisting of animals in file and some representations of people (see Plate XI). From the latter we know that at this period the skirt-shaped garment for men which becomes so familiar at a later date was already fashionable; also that a shaved head and face was the alternative to a long beard with no moustache and hair in a "bun" at the back.

Finally, an unmistakable representation of a chariot bears witness to the invention of wheeled vehicles.

But the pottery, above all, is characteristic of this phase. The actual technique has improved, and these vessels are now made on a proper spinning-wheel, and covered with a fine slip or wash of liquid clay which when dry takes a high polish. There are no longer painted designs, but the colours vary from a grey ware with a shiny black slip to brick or plum red. Jug and cup types are provided with handles, a device which is employed at no other time in Mesopotamian ceramics. This is one of many features which, as we shall see later, suggest an infusion of new ideas and perhaps new blood into the Sumerians at this period.

It will be seen from the stratigraphical diagram (see Fig. 4) that in dealing with the Jemdet Nasr period we have to begin to take into consideration various new sites, such as Kish, Fara, Tell Asmar and Khafaje, which were first occupied at this period. For there are now signs of the invasion of Akkad by the Sumerians. They seem to have imposed themselves upon the original Martu colonists, so that Akkad from now onward came under

Sumerian domination; and only in the very deepest layers at Kish are indications found of the Microlithic culture of its first inhabitants. Yet it is just possible that some of the distinctive characteristics of the new phase are due to the adoption by the Sumerians of conventions which they found indigenous in Semitic Akkad. The design, for instance, of the new painted pottery, if not its polychrome technique, shows signs of certain prototypes in textiles and basketwork.

These designs (see Plate VI, *b*) are often painted directly on the natural clay, but sometimes a white slip is prepared for it. A wide band of ornament is usually arranged in metopes round the shoulder of a pot, and consists of chequers, triangles and cross-hatching with occasionally a crudely drawn scorpion or some animal isolated in the centre of a metope. Shapes include spouted jars in large numbers, while jars with flattened rims and four small perforated lugs upon the shoulders are extremely typical.

Some of the finest examples come from Jemdet Nasr itself, but fragments from Khafaje in a similar style—which survived into Early Dynastic times—were painted with several registers of human figures and throw important

light on the period. For here is a four-wheeled chariot being drawn into battle by three animals which are now generally attributed to the wild ass family (when a representation in copper of a similar animal was found in a slightly later period at Kish, the Field Museum preferred to call it "a species of equidæ"). There is also the representation of a feast with two people drinking through tubes from the same vat of beer, and other scenes typical of all later attempts to depict Sumerian daily life. Figures occurring elsewhere have the same details of dress and coiffure as we have seen above in the Uruk period, only now more clearly defined. The skirt, for instance, with a piece rolled around the waist which can be used to cover the upper part of the body, is cross-hatched to represent the texture of wool or a sheepskin: the familiar hooked nose is beginning to be in evidence.

The very language of tablets from Jemdet Nasr is now definitely Sumerian. Moreover, there have been great strides in the development of the actual script, and a sign may now be used to denote a phonetic value or syllable. Bronze objects are found for the first time: a chisel, a dagger and barbed fish-hooks almost indistinguishable in shape from those used

to-day. Men are buried in a crouched position among their painted pottery, and from their graves come amulets and pendants in the shape of birds and animals which they had worn, stamp seals with geometric patterns and cylinder seals with new and improved designs (see Plate III, *a* and *b*). From the Jemdet Nasr level at Ur comes a wild boar skilfully carved in steatite, which is the first example of sculpture in the round. It is a fine piece of formal design, and its only rival, as an *objet d'art* of so archaic a period, is a recent find at Warka. This is a magnificent stone vase (see Plate VII, *a*), standing almost to the height of a man, and ornamented with sculptured reliefs in three registers. The two uppermost represent a procession of naked priests and attendants bringing offerings in the form of jars of wine and heaped bowls of food to a goddess, while in the lower frieze are various kinds of domestic animals, including a ram with widely-spread and curling horns, an animal depicted rather frequently at this time. In the British Museum there is a long stone trough found by illicit diggers at Warka during the War, and bearing very much the same design. But it is much restored, and some fragments of it still remain in Berlin.

At Jemdet Nasr we have all the rudiments of Sumerian civilization, and the stage is laid for the historical period. But before approaching the early dynasties we must retrace our steps a little in order to observe certain excavations outside Sumer and Akkad, which have each in turn thrown new light on the finds already described.

To begin with, there is Susa, the ancient capital of Elam, where, as long ago as 1891, a French Expedition led by de Morgan appears to have reached prehistoric levels corresponding to all the cultural phases already mentioned, but at that time still unknown in Mesopotamia. Elam, now part of Persia, was a small fertile plain beyond the Zagros mountains watered by the river Kerkha and the Karun, mentioned at the beginning of this chapter. The Mission Française sank shafts in the citadel mound and encountered, among other things, great quantities of very beautiful painted pottery. They eventually penetrated to the earliest stage of its occupation and found upon virgin soil traces of a reed-hut settlement surrounded by an earth rampart. More recently, M. Mecquenem returned to this site with the intention of elucidating the stratigraphy of the mound, and in consequence

we now have this pottery and other material mobilized into a succession of numbered and lettered stages from virgin soil to the surface. This system is now employed in almost every stratified "sondage," and is most convenient for anyone trying to detect evidence of racial fluctuations among such material remains.

We have seen that the earliest Sumerians probably arrived in Mesopotamia from the East. In support of this Sir Leonard Woolley is even ready to quote from the Book of Genesis, "and the people journeyed from the east and came into the land of Shinar and dwelt there." And it is now beyond question that the earliest pottery of Susa (Ia) stands in a parental relation to that from Al'Ubaid. In fact Mecquenem found it overlaid by a stratum (Ib), every detail of which had its counterpart at Al'Ubaid. It is therefore of great importance in studying Sumerian origins, representing, as it does, the Iranian Highland culture which was already the heritage of the first arrivals in Sumer. This culture was certainly predominant throughout the whole of the Iranian plateau and extended as far as the mountains bordering the Indus valley. For the equivalent of the Susa Ia pottery has been found by Prof. Herzfeld at Persepolis, further

south at Bushira and in the east at Shahi Tump, and has, in fact, been traced by Sir Aurel Stein right across Persia and Baluchistan. Furthermore, it will presently be seen from its appearance at Samarra, Arpachiya, Nineveh and Tepe Gawra in Iraq that the continuum must at one time have been limited to the west only by the Tigris valley.

The pottery itself is worth studying (see Plate VII, *b*). It is almost impossible to reconcile the idea of a household where such beautiful and decorative vessels were used for the most humdrum purposes, with a primitive and almost savage community. They have fine bold designs painted for the most part on the natural clay in warm, black pigment. A flat bowl shape is common, and the inner face in this case is decorated from the centre outwards with radial geometric motives based on the swastika or the Maltese cross. But in others the geometric patterns are more varied, and are combined with only partially conventionalized representations of birds, ibex, bulls, dogs and, more rarely, men. Here one can even see natural forms which, when stylized beyond recognition, may have given rise to certain motives in Al'Ubaid pottery. Susa must have been continuously in contact with

Sumer from this time onwards, for the subsequent stages, Ic and Id, correspond accurately to the Uruk and Jemdet Nasr phases. The category known as Susa II was at one time the subject of a slight controversy, but is now generally considered to be applied to remains covering a number of periods. The most important of these was a new and distinctive type of painted pottery which can now be called contemporary with the Early Dynastic period. Birds and animals are depicted on this ware, often with a striking naturalism, and for this reason it was for some time considered to be an offspring from the Ia group. This was eventually disproved. It became clear that in later developments of the early painted designs the representations of natural objects are more and more stylized: a procession of birds, for instance, develops into a mere band of cursive ornament, or a series of ibex have the curve of their horns exaggerated until they become decorative cyphers, whereas in the Susa II ware only realistic pictures of animals occur isolated in a space between the geometrical patterns.

The next site to produce relevant material of this kind was Samarra in north Iraq, where Prof. Herzfeld in 1930 discovered prehistoric

remains beneath the ruins of the great city which supplanted Baghdad as capital of Arabia upon the death of Harun al Raschid. Here was a cemetery occupying about a metre and a half of earth between virgin soil and Arab houses of the ninth century A.D., and therefore dating from a single period. The bodies were extended like those at Ur in the Al'Ubaid period, and the painted pottery found with them seemed to occupy an intermediate position between Susa Ia and Al'Ubaid. Shapes were primitive, for the most part without bases, rims, handles or spouts, but the pictures were varied by the addition of women with flowing hair, scorpions and fishes. There was a profusion of beads made of limestone, turquoise, cornelian and shell; in one case over 3500 in one grave suggested a beadwork cover over the whole body. Small copper tools and alabaster cups were also found. Generally one may interpret this as an outpost in north Mesopotamia of the Iranian Highland culture we have just discussed, at a date previous to the arrival of the first settlers in the south.

At this very early date three great cultural provinces are now discernible in Western Asia, and can be distinguished most easily by their pottery. One of these, as we have seen, occu-

pied the Iranian Highlands as far east as Baluchistan, and in the west comprised the earliest settlements on the Tigris and Euphrates. The second, which may be called "Anatolian and Transcaucasian," spread over the whole of what is now Turkey-in-Asia, extending its influence to the east into Northern Persia, to the west as far as Early Minoan Crete, and southwards into Sumer, where its intrusion gave rise to the cultural phase now called the Uruk period. This is typified throughout by the grey and red monochrome pottery, which we have seen at Warka, and many characteristic shapes. The third, or "Syrian," province occupied a long strip of piedmont country south of the modern Turkish border from the north Syrian coast to a point some distance east of the Tigris. This was anciently called Subartu, and was occupied by those fair-haired Subaræans whom we have already mentioned as the earliest settlers in Assyria. This last province is of first-rate importance because so much recent research in connection with Mesopotamian origins has taken place in that district of North Iraq whose early history comes under Syrian influence.

Its existence was first suspected when Baron Max von Oppenheim, digging a Hittite site

called Tell Halaf near the point where the Iraq, Syrian and Turkish borders meet, encountered in his deepest layers great quantities of a remarkable new polychrome pottery (see Plate VIII, *b*), which evidently had no affinities whatsoever with the Susa-Samarra-Al'Ubaid group. The Baron belongs to what we have referred to as the Old School of diggers, and it is worth digressing a little at this point to recall the conditions under which he worked at Tell Halaf. He made his first investigations in 1899, but the main part of his work took place during the three years preceding the Great War. During his early campaign there was no Berlin-to-Baghdad railway, and all his equipment and stores had to be brought by horse or camel many days' journey from Aleppo. Furthermore, this border country was in such a disturbed and unruly state that he found himself almost entirely dependent for the safety of his expedition upon the hospitality of very wild Arab tribes. One of his European staff was killed by an Arab raiding party while riding to Aleppo for supplies: another died of a fever which is bred among the headwaters of the Khabur river, where Tell Halaf lies. He was compelled to build a

large expedition house to cope with this isolated community, and soon found that in addition to the actual staff his camp-kitchen was providing for as many as seventy people, including a guard of twelve mounted Turkish soldiers.

His finds included an enormous quantity of sculptured slabs and statues, and in 1913 a portion of these was successfully removed to Alexandretta for shipment to Berlin. The following year, however, one boat-load was captured by allied warships. Soon after the War the expedition house was taken over and fortified by Mustapha Kemal's Turks, and eventually razed to the ground. When von Oppenheim returned to work in 1927, his first task was to excavate twenty-seven statues from beneath the ruins of the house and dispatch them in thirteen trucks on the new railway to Aleppo: others had proved too much of a temptation to local stone-masons. This sculpture constituted the decoration and furniture of a huge temple-palace attributed at the time to the twelfth century B.C., and it was beneath this that the painted pottery appeared. The lower strata of the *tell* had suffered a considerable *bouleversement* owing to the excavation

of great terraces for the foundations of the later building, and very little observation of stratigraphy could be made as a result. But the painted pottery created a great sensation, and since it was also found at such sites as Carchemish and Sakje Geuzi, it is now considered to have represented a distinctive cultural province.

Looking at this Tell Halaf pottery, and for that matter at a great deal of the Iranian ware, one finds it almost impossible to associate such extreme antiquity (possibly the fifth millennium B.C.) with this tasteful and accomplished craftsmanship. Very little idea can be given in words, or even in a black-and-white reproduction, of the decorative quality of these vessels, except as regards the shapes, which in some cases are almost as good as the ornament. Most typical are deep bowls or craters with funnel-shaped necks, and bulging jars with relatively long necks swelling out at the base. They are covered with a thick creamy slip on which fine and elaborate designs are painted in a shiny orange-red or warm black pigment. Here too are representations of animals and birds varied with geometric patterns, but they are distinguished from the Iranian group by a

finesse and elaboration of ornament which it is hard to describe. It would be a temptation to connect them with the Jemdet Nasr pottery if the older ware were not so infinitely superior in quality.

It remains to mention four sites in Assyria where material remains of all three of the cultural provinces just enumerated have recently been found in their proper historical relationship, and combined with imports from Sumer. These may be considered in two pairs, as the sondages at Nineveh and Arpachiya were successive enterprises of the British Museum, while the University Museum of Philadelphia is still engaged on parallel excavations at Tepe Gawra and Tell Billa.

In 1932 Dr. Campbell Thompson sank a shaft from beneath the Assyrian Ishtar Temple at Nineveh down to virgin soil, passing through 90 feet of occupational débris. Seventy feet down he struck a floor level which could be dated to Manishtusu, the grandson of Sargon of Akkad, who reigned about 2450 B.C. And in the last twenty feet he passed through successive layers of pottery representing nearly all the prehistoric phases and influences which we have so far discussed. His chronology was

furthermore assisted by finding, in his fifth layer from the bottom, for the first time in Mesopotamia, a ware painted with the figures of animals which exactly corresponded to the problematical Susa II pottery. The implications of his lowest strata were of great interest, and could only be very inadequately investigated at the bottom of a narrow shaft. At the same time an adjoining *tell*, Arpachiya, was discovered where, in addition to there being signs of Tell Halaf pottery, the settlement directly beneath the surface seemed to belong to the Al'Ubaid period. This site was accordingly dug by Mr. M. E. L. Mallowen in 1933, with striking results. The Al'Ubaid period colony proved to be an impoverished successor to an earlier settlement characterized by magnificent examples of Tell Halaf ware. This was a substantial village with a central shrine and cobbled streets. The houses were built of brick and in many cases had stone foundations. Most important of all, there were the remains of circular domed chambers built in stone, and each approached through a rectangular "dromos" or vestibule similar to, and perhaps the prototype of, well-known tombs in Mycenæ and Crete. These "tholoi" were evidently part of the "Syrian" culture, and may even-

tually prove useful in establishing its foreign affinities.

Of the second pair Tepe Gawra was first excavated by Dr. Speiser. This was a tall, hump-shaped mound forming a conspicuous landmark in the cultivated plain east of Khor-sabad, and he started by cutting a stepped trench down one flank in order to obtain evidence of stratification from the summit to plain level. Later his work was continued by Mr. Charles Bache, who worked horizontally over the whole area of the *tell*, examining and removing one layer after another. Here again in the deepest layers was a prosperous village possessing a small temple apparently contemporary with the Jemdet Nasr period. In this case the houses were built of square-edged kiln-burnt bricks. Their façades were already decorated with alternate buttresses and recesses, and in the recesses were small windows. There were arched porches before the doors and in some cases bitumen-lined bathrooms. A terra-cotta model was found unmistakably representing a "covered wagon."

With the second site, Tell Billa, eight miles to the east, we are less concerned, since it shows no signs of occupation prior to the Early Dynastic period. The earliest pottery was a painted

ware mainly in the shape of cups or chalices, and is again exactly parallel to Susa II. Other results are as yet unpublished. Now, therefore, we may turn to the more sensational finds of the historic era.

IV

THE EARLY DYNASTIES

THE dating of the Early Dynastic period is a subject upon which one can still speak only with a certain amount of reserve. Sir Leonard Woolley originally suggested 3100 B.C. for the beginning of the first Dynasty of Ur. Working back from this point, he allowed 300 years for the time during which his cemetery was in use and accordingly fixed the first of the royal tombs as "soon after 3500 B.C." Dr. Frankfort, however, by an even more convincing piece of reckoning, reaches only 2900 B.C. as a probable date for the beginning of the dynasties, and firmly adds, "Any earlier date is altogether devoid of factual foundation." As the rise and fall of several dynasties seem likely to have preceded the time of the Ur tombs, the two dates present rather a disconcerting discrepancy. It may also be recalled that when collaborating in publishing a discussion of the Mari finds, Dr. Frankfort and M. Parrot were unable to agree to within 200 years as to the date of

Sargon of Akkad which they proposed to use as a basis for reckoning the age of M. Parrot's newly found temple. The dating of Sumerian remains from the Christian Era is still a risky procedure for archæologists, and dates such as these must appear to the layman to vary, like fashions, from year to year.

We at least know that at a certain period in the traditional history of Sumer "the Flood came" and "kingship was sent down from on high." At Kish, Warka and Shuruppak, which is the ancient name of Fara, traces were found of just such a flood directly above the latest remains of the Jemdet Nasr period; and when one remembers that Uta-Napishtum, the Noah of the Babylonian Deluge story, came from Shuruppak, this seems to have a better claim to be identified with the Flood of the Old Testament than the earlier one at Ur. In any case, at a point directly above these later flood deposits we begin to find seals inscribed with royal names recognizable from the king-lists, and a historical period has therefore been reached. Prof. Childe has suggested that the conquest of Sumer by some foreign people marked the inception of the Dynastic period, and that the idea of kingship was then introduced, perhaps from Egypt. However this

may be, the new period is principally distinguished from its predecessors by its exceptional wealth. There are hardly any new elements in the material fabric of its everyday life which were not already present in the Jemdet Nasr period, yet it is the increased facilities for distribution and importation in conjunction with a more mature craftsmanship, which have produced this effect of progress and prosperity.

All archæological finds seem to consist of buildings, graves and objects found in or connected with one or the other, and in dealing with the abundant remains of the Early Dynastic period one may conveniently divide them into three categories on this basis.

(1) *Buildings*

Sumer and Akkad were now united into a single nation, whose colonies extended far into northern Mesopotamia. But Dr. Andrae was the first to notice that the temples of Sumer proper were distinguished from those of Akkad and the northern colonies by the most important principle of their ground-plans. In the case of the southern type of plan, one enters upon the main axis of the building, and is

immediately confronted with the shrine through a vista of courts or antechambers. But in the north, the shrine unit is a long rectangular room with an altar at one end, entered at the other by a door on the cross-axis (see Fig. 3, *c*). These two distinctive functions of planning persist into Babylonian and Assyrian times; and whereas the southern type of building is best illustrated by temples of the post-Sargonid period, there are three early Sumerian temples of the northern variety which may well be discussed simultaneously. The first of these is the archaic Ishtar temple at Ashur, a Sumerian colony among the Subaræans of the north which was excavated by Dr. Andrae himself. The other two are the temples of Abu and Sin respectively at Tell Asmar and Khafaje (Fig. 3, *c* and *a*), whose later rebuildings are contemporary with the Ishtar temple at Mari (Fig. 3, *d*), and therefore with that at Ashur.

The German architect's plans of the Ashur temple resemble a Chinese puzzle of appalling intricacy. The ruins of seven later temples, in many cases with stone foundations, were superimposed upon the archaic shrine, and it is amazing how much material and information they managed to recover from the last half-metre of soil which intervened between the

earliest of these Assyrian buildings and the living rock. Two gateways led into the temple courtyard, and the rooms of one gatehouse as well as the shrine itself were littered with fragments of broken limestone statues. This exactly resembled the state of affairs in the Sin Temple at Khafaje, for both had evidently been destroyed by fire and their contents ruthlessly smashed. Here the brick ledges upon which they had stood could still be seen projecting from the walls; gatehouse and shrine must have been decorated all round with a row of these curious stone people, having the appearance of an exhibition of sculpture in a modern gallery. There is now very little doubt that they are portraits of human beings and represent a system of vicarious worship. A man would present a statue of himself to the temple, so that it might be perpetually in the presence of the divinity whether he himself found time to worship or not.

The sanctuary was a long, rectangular room, and at one end steps led up to a platform, upon which stood the statue of the goddess before a recess in the wall. No signs remained of the statue itself, but some idea of it can be obtained from a painted figure modelled in relief on a gypsum plaque, evidently an artist's

attempt to depict not so much the goddess herself as her statue. This seems to be an experiment in a new medium, for the manipulation of the red and black pigments is a little crude; yet the artist has managed to convey something of the figure. The goddess wears a wide necklace, a scarf across her shoulders and a loin-cloth, but her bosom and narrow waist are bare. Her hair is dressed in curious curls, and her eyes, which are set diagonally, appear to be of disproportionate size. Generally speaking, if the statue itself at all approached life-size, it must have been an impressive affair. Some of its accessories were found lying on the platform: two of the goddess's mirrors, one of silver and one of bronze, and a quantity of frit beads from a necklace. There was also other interesting furniture in the shrine: a large earthenware cistern for water with a smaller pot beneath, showing that water was filtered and cooled in this way just as it is to-day in Iraq; pots suitable for burning incense and others for pouring libations, probably over flowers, since a sort of ceremonial flower-watering is often depicted on seals. Finally there were the remains of a group of terra-cotta model houses which seemed to have stood in a row before the shrine. These

have several storeys of windows, and here and there a snake, an animal or a human being "appliqué" in low relief for ornament. They seem to have been a fanciful form of stand for offerings, and perhaps each symbolized a dwelling-place for the goddess. It is interesting to compare a corresponding cult-object found in the Sin shrine at Khafaje (see Plate IX, *a*). In this case the little clay house runs on wheels, and at either end are two quaint figures mounted on horses to draw it. This is perhaps a faithful picture of a Sumerian cottage. A tame gazelle lies beside the door, and there is a ladder set against the side of the house for the purpose of reaching the flat roof. There are even swallows beneath the eaves perched upon the projecting ends of the rafters. This lower part of the structure supports a pair of ornamented jars, and above them a flat dish of what is called the "fruit-stand" type. Dr. Frankfort's explanation of the group's significance is that the two jars contained respectively oil and water, and that these were poured successively into the dish in order that omens might be taken from the pattern of the oil upon the water, a method of fortune-telling known from the texts to have been used by ancient Sumerians.

This Khafaje temple (Fig. 3, *a*) is a somewhat larger building than that at Ashur. There is an altar at one side of the central court surrounded by small offering tables, and in the centre the head of a great well lined with burnt brick. The sanctuary is entered from here through an ante-room. The latter is so long and narrow as to be almost a corridor and has a small altar at one end (half of which had disappeared owing to an illicit digger's shaft having penetrated to this point). The sanctuary itself has an altar on either side of which doors lead to two small sacristies. Here the walls are ornamented with vertical grooves such as are elsewhere only found on the façades of buildings. One of the other rooms adjoining the court had a ledge for statues, and it was for the most part here that the broken and burnt fragments were found of rather more than 150 limestone figures. A few could be pieced together to make complete statues, and it was amusing to find that occasionally a figure had been broken while in use and rather clumsily mended with bronze rivets or with bitumen. When all these fragments were assembled in the camp antiquities magazine under headings such as "Arms," "Bodies" or "Legs," the whole effect was that of some fantastic casualty clearing-station.

But other rooms in the temple were equally rich in *objets d'art*: exquisite little amulets carved in coloured stones to represent birds or animals; a kneeling ram, a kneeling calf, a vulture, or a wild boar stylized into simple, decorative shapes. Some light was thrown on the decorations of the interior by a species of square alabaster plaques pierced with a square hole in the centre for plugging to a mud wall. These were usually carved in low relief with three registers of figures depicting a ritual scene. One typical subject is evidently a sacred festival. At the top a god and goddess sit upon chairs facing each other, the goddess having a foot-stool. They drink from goblets, while three servants administer food and wine. In the lower register other attendants appear. Two are bringing more food in baskets upon their heads: a third has a lamb or kid in his arms: two more carry a great stoppered jar of wine slung on a pole between them: a sixth plays a lyre, while a seventh has his arms akimbo and is executing a dance very much reminiscent of a "hornpipe." In another case the lowest register shows a war chariot being prepared. It is drawn by four asses and exactly resembles those found in early tombs at Kish, which will be mentioned later. In connection

with this second plaque a surprising thing occurred: a large fragment was missing from the bottom left-hand corner which included the whole of the war-chariot. Presently, however, it was discovered from a photograph that a fragment of a similar plaque, found some 200 miles away at Ur, could be used to complete the picture, and fitted with such astonishing accuracy that, had they been clay, the two reliefs might be said to have been cast in the same mould (see Plate VIII, *a*). One can only suppose that this was a design whose every detail was prescribed by convention, and consider the fact as testifying to the surprisingly homogeneous distribution of Sumerian culture over the whole country. Even so, it is hard to know how two sculptors in different towns could carve two pictures in stone as nearly resembling each other as, say, two art students' copies of Leonardo da Vinci's *Cenacolo*.

There were also fragments of a magnificent green hæmatite bowl elaborately carved in relief with a tangle of men and animals, mainly ibex. In this and one other case the design included a representation of the reed architecture of many centuries before in a form which has now proved to be another strict ornamental convention.

At Ashur there seems to have been no *ziggurat* in this early period. At Khafaje the principle of an elevated shrine is introduced in the great "Oval" temple-enclosure, whose earliest foundations are contemporary with the fifth rebuilding of the Sin Temple. From the scanty remains of its foundations, the main outline of a stately group of buildings can be reconstructed (see Plate IV). The buttressed walls of the oval towered high above the flat roofs of the town, and as one approached the main entrance their embattled parapets retreated in steep perspective to right and left. Great towers flanked the gateway; the guard-room within was in shadow, but beyond the second archway one was faced with a vista of sunny courtyard, terminating in the broad flight of stairs which led up to the temple platform. At the summit of the platform a little shrine, which we may imagine as resembling the "White Temple" at Warka, perched high in the air, and could be seen above the enclosure walls from every roof-top in the town. The courtyard was surrounded by storerooms and other apartments connected with the administration of the temple. At intervals there were small altars or offering pedestals, and between them in the dried mud of the pavement Mr.

Delougaz was able to detect the imprint of hoofs of many sheep. In fact, at one point there were signs of bare human feet sliding behind an animal which its owner was endeavouring to restrain. These must have been flocks for sacrifice, and were kept in enclosures behind the temple platform.

Finds in the oval were few, owing to this area of the *tell* having been denuded in the course of time, in some places to beneath the floor-level of the building. The only sensational discovery was a group of three magnificent copper-statues standing nearly two feet high, which some thief must have stolen from the sanctuary, wrapped in a cloth and buried beside the outer wall. Each is mounted on three ornamental legs and has triple prongs projecting from his head, perhaps to hold a bowl of incense or a rushlight. They are naked in the presence of the god and have their hands clasped before them, while their hair and beards are treated in a manner which we shall see very clearly defined in the Tell Asmar group of statuettes. The metal was 99 per cent. copper, and a small percentage of tin must have been present in the ore. They were apparently cast by a "cire perdue" process and the various parts welded together most professionally.

We may now turn to the contemporary Abu Temple at Tell Asmar (Fig. 3, *c*), a modest little building obviously serving a much smaller community. It consisted at this time of a single compartment arranged on the "northern" principle, with an entrance on the cross-axis between two little towers. An altar at the west end was topped with a stone slab, and behind this the pedestal for the cult-statue was placed in a raised position before a niche in the wall. Near by a door led into a kind of out-house, mainly occupied by a large baking oven, which can only have been connected with ritual feasts. Instead of a "bench" for statues two small pedestals were set side by side against the wall half-way down the room. Fragments of statues were again found, and pieces of two relief plaques, one ornamented round the edge with an inlay of mother-of-pearl in bitumen.

This single-shrine temple corresponds to the third and latest subdivision of the Early Dynastic period, and to it evidently belonged the fine copper "service" found in an adjoining building, as mentioned in an earlier chapter. On penetrating beneath its foundations walls were encountered at a slightly different angle, and it immediately became clear that there was a considerably larger temple beneath.

The first workman to reach the floor level of this earlier building at once encountered broken vessels made of alabaster, grained marble and translucent green serpentine, a foretaste of exciting finds to come. The plan (Fig. 5) was square and modelled on that of an ordinary dwelling-house, a fact which suggests a conception of a temple as the home of a god. Six rooms surrounded a central court: an entrance vestibule with traces of a stair to the roof, a small ablution chamber paved with burnt bricks and lined with bitumen, a priest's living-room with a hearth and three sanctuaries of varying sizes. Each of these had an altar at one end, and the first to be cleared was the largest. Several curious lattice-work pot-stands or braziers stood before the shrine. The altar itself had a bitumen-lined channel running down one side to carry off libations or the blood of sacrifices, and the recesses between it and the wall on either side proved to be full of interesting objects flung down when the temple was abandoned. Here again, just as at Ashur, was the goddess' bronze mirror, and a whole string of large highly polished stone beads, too heavy for human use, but perhaps an adornment of the cult statue. There were stones carved into the shape of animals as

terminal ornaments for pieces of wooden furniture, inlay figures exquisitely cut in mother-

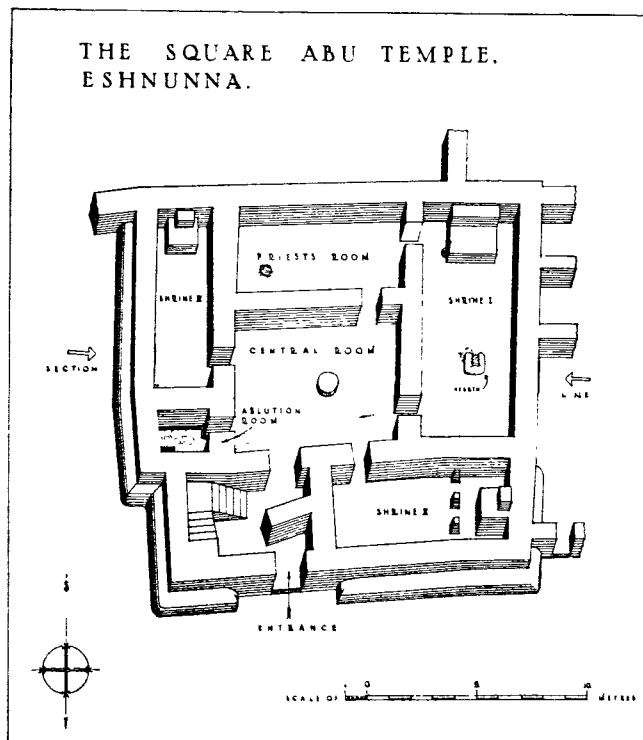


FIG. 5.—Plan of the “Square” Abu Temple at Tell Asmar.

of-pearl with hair and beard filled in with black paint, and more stone and alabaster goblets. It is certain that the wrecking of the building

was intentional, for pieces of the slate plaque to which this inlay belonged were found scattered in five different rooms.

Fragments of two broken statuettes were found in Shrine I and a third in Shrine III, all indicating a new and finer technique in carving, and retaining some black pigment on hair and beard, but interest in all these finds was to be temporarily eclipsed when events in Shrine II claimed general attention.

In addition to the usual raised altar, this sanctuary had four little pedestals with sloping sides, ranged in a row before the shrine, with one against the wall on either side. These might have been bases for the upright members of a kind of rood-screen. The floor upon which they stood had been carefully cleaned and the room photographed, and the men were beginning to penetrate beneath it in search of an earlier floor-level, when the writer's attention was called to an old Turcoman who was working in the corner between the altar and the wall. His knife had just broken through a crust of clay and revealed a large cavity beneath the floor. With the aid of a match one could see some way into this, and it was an amazing sight which met the eye. On top were three clean and almost undam-

aged alabaster statues, with the light of day glinting on the lapis-lazuli and polished bone of their inlaid eyes for the first time in five thousand years; while disappearing into the darkness beneath were the black-painted beards and tresses of others crushed beneath their weight. It took two days to disentangle and extract them. At the end of that time twelve almost undamaged statues of men and women had come to light, including a kneeling, naked priest, unique in Sumerian art (see Plate X, *a*). With them were several small amulets, and for some reason a great quantity of smooth white pebbles. Finally, lying side by side at the bottom of the shaft were the first cult statues ever found in Sumer, a god and goddess very nearly half life-size, and of awe-inspiring appearance (see Plate IX, *b*). Both were distinguished from their worshippers by enormous inlaid eyes, reminding one of the "all-seeing eye" of old religious pamphlets (see Plate II). The god had appropriate symbols carved in relief on his base, and the goddess the broken remains of a smaller statue let into hers, perhaps a son to complete the "trinity."

This group of fourteen statues reveals a phase of Sumerian art hitherto unknown except

for much-damaged fragments, and is particularly interesting, since the building in which they were found belongs to the second subdivision of the Early Dynastic period. It seems probable that we owe their excellent state of preservation to their having been carefully buried beneath the floor of the shrine to which they belonged. For their sacred character would prohibit their being removed from the temple, and when the city was in danger of attack or when they were merely to be replaced by new ones, this would be the simplest way of disposing of them.

Beneath the Square Temple was again a smaller building, still evidently dedicated to the same purpose. It had a single shrine oriented to the east (the only point of the compass not favoured by any of the three sanctuaries above), a sacristy, a vestibule and an entrance courtyard. From the point of view of finds it proved something of an anticlimax. Only the little sacristy was found littered with the remains of nearly seven hundred broken pottery goblets, perhaps used in some ritual which involved breaking one's "glass" after drinking. A depth of something like thirty-five feet beneath the surface had now been reached; yet between the earliest

foundations of this building and the layer of debris which preceded virgin soil it was possible to trace several versions of a still earlier and very primitive shrine, dating, to judge by its pottery, from the Jemdet Nasr period.

Among the Sumerian buildings of the South, one which cannot be ignored is Dr. Hall's Nin-Khursag temple at Al'Ubaid of which mention has been made above. Like the contemporary shrine at Khafaje, this temple stood upon a raised platform, and though little of the plan could be recovered from its stone foundations, it will always be remembered by the astonishing collection of architectural ornaments which had partly fallen from the façade and lay piled against the lower retaining-walls. First there were three copper pillars, consisting of a thin plating of metal over a core of clay which had once been wood, and five more covered with brightly coloured inlay of triangular tesserae. Red sandstone, black limestone and mother-of-pearl, alternated to form a colour scheme such as decorated the walls of Sumerian houses at Warka. Each tessera had been fastened by copper wire to a layer of bitumen on the wooden core. The columns had no bases. Then came four heads and two foreparts of

bodies of life-sized lions, composed really of a thin mask of copper over a core of clay and bitumen mixed with straw. They had large eyes of blue schist, inlaid in white shell, and red jasper tongues also fastened with copper wire. With them were other smaller heads of leopards or cats.

Flung down among these was the great copper relief from the lintel of the main doorway, now restored in the British Museum: Imgi, the lion-headed eagle, mythical bird of Ningirsu, holding two stags by their tails. This is an elaborate piece of casting, and the separate pieces are fixed together with lead. The difficulty of disentangling this litter of much-oxidized copper objects from the hard clay in which they were buried must have been formidable, and Dr. Hall was reduced to using desert scrub as packing. On reaching the British Museum this material was found to contain a good deal besides antiquities.

When, after an interval, Sir Leonard Woolley continued the work, he was better equipped for dealing with these fragile remains. This proved an advantage when new piles of metal figures began to appear. There had apparently been a procession of copper statues-in-the-round of standing bulls, and a copper

frieze of bulls in relief. In addition to this there was a frieze of black slate inlaid with bone and limestone figures representing men and animals. This appeared to be a pastoral scene in some way connected with the temple. There are some cows being milked, curiously enough from behind, as sheep are milked to-day in Iraq; while their calves, muzzled to prevent them from sucking, are tied to them by halters; men are straining and storing the milk in tall vessels, and in the centre other calves are attempting to break out of a reed lyre constructed like the early Sumerian marsh-dwellings. Another part merely represents a procession of cows and bulls to their pasture. Woolley made a perspective sketch at the time to illustrate a hypothetical reconstruction of the temple entrance and stairway leading up to the platform. In this he grouped the columns to form a porch in front of the doorway and used all the copper animals and reliefs as bands of ornament on the façade. This seems a probable arrangement, except that he has concentrated every single piece of ornament found upon this one small section of the building, whereas photographs showing their disposition when discovered suggest that they had been brought from other parts of the

temple and roughly stacked at the base of the platform.

The sum-total of all the information provided by the excavated remains of these buildings leaves one with a fairly thorough knowledge of architectural methods and conventions at this period. Walls are almost invariably of sun-dried plano-convex bricks inside the room, often having a low skirting of the kiln-baked variety and occasionally limestone foundations. These bricks are laid in a curious manner which suggests that they have their origin in a stone construction. They are set on edge leaning against one another at an angle, like books on a shelf, successive courses leaning in opposite directions so as to make a herring-bone pattern. The end of the row is supported by a pile of bricks laid flat to form the corner, and about every fifth course is composed of stretchers also laid flat to strengthen the fabric. Details of domestic building-construction were obtained from a private house of this period at Tell Asmar. Doorways were spanned with true arches. Whether these had been built over temporary centring is uncertain, since in all cases they were small enough for the mason's assistant to support the two sides of the arch with his hands

until the keystone was inserted. Small square windows were found high up in the walls with traces of wooden lintels over them and in one case a terra-cotta window-grille, precisely like the wooden ones used in modern Arab houses. Floors were of tamped earth and usually below the street level owing to the rapid accumulation of dried mud outside. A flat or low-pitched roof supported on poles could easily be surmised after observing the model cottage from the Sin Temple and other carved representations, and this was proved to be correct by finds in a particular house at Khafaje.

This house (see Plate VII, *c*) merits a more detailed description. It belonged perhaps to a temple official, and was built up against the buttressed wall of "the Oval." It had apparently been burnt to the ground, and the inmates had left in a great hurry, leaving behind them almost everything they possessed. The roof had fallen in and covered the floors with debris, and here beneath the charred remains of the ceiling were preserved all the accessories of Sumerian every-day life. The rooms were built round a central hall, as is invariably the case with private dwellings, and each contained objects which suggested its function.

One room appeared to have been a kitchen. There was a clay hearth for cooking and many other domestic objects: a large shell cut into the shape of a lamp and a burst bag of linseed for making oil, the charred remains of lentils in a broken jar and some barley with pieces of the sack in which it was stored. A pile of blue-black mussel shells was a clue to the nature of the last meal eaten in the house. A room off the entrance lobby contained the remains of a fisherman's nets: a pile of stone rings used as weights, most of them with the charred thread of the net still round them, and flat discs of wood which had been floats; also a copper fish-hook. In a cupboard near by a complete day's catch seemed to have been stored, for it was several inches deep in the bones of various kinds of river fish. A door on the main axis of the central court led to a small room which was evidently used as a chapel. There was an altar plastered with white gypsum, and, scattered about the floor around it, a number of interesting objects: ten stone statuettes, some of them complete, and the heads of seven more, one figure of a ram, four amulets shaped like animals, a stamp seal, a cylinder seal and a double cosmetic jar. In the adjoining room was

found the carved plaque already mentioned depicting the preparation of a war-chariot, and it was here also that an important architectural discovery was made. Large fragments of the fallen ceiling remained intact (the beams being only partially burnt) and revealed every detail of the roof construction. The room had evidently been spanned with stripped poplar poles, and these in turn covered with coarse matting and tamped earth. Rolls of clay had been wedged into the angles between the beams and the mats to prevent the latter from sagging or splitting, and fragments of these were found baked hard by the fire and still bearing the impression of the beam on one side and the matting on the other. Here and there a crevice in the ceiling was filled by a wasps' nest.

(2) *Tombs*

Any discussion of Sumerian graves must needs begin with some mention of the so-called royal tombs in the great cemetery at Ur. Of the large numbers discovered, only a few were found to have escaped the attention of tomb-robbers, the temptation afforded by their valuable contents having been so great. In

fact the first indication Sir Leonard Woolley had of the rich finds which awaited him in the cemetery was the appearance of the famous gold dagger and toilet-set, which were merely offerings buried in the upper layers of filling above a grave which had itself been plundered. And the first actual tomb-chamber which he found had been broken into, and so effectively emptied of its contents that a little gold leaf and some copper pots were all that was left.

Not the least interesting feature of these graves is the actual structure of the tomb. At this stage in history it has come to be considered as a complete underground chamber or dwelling to accommodate the dead man and all the paraphernalia he may require for a journey to or in another world. Two of the tombs which were found empty consisted of as many as four compartments. In each case they were built of stone rubble and had two outer compartments which were vaulted, and two inner compartments covered with true domes. The knowledge of the principle of the dome, in addition to the actual method of building one, is remarkable at such an early period.

The first tomb found to be undisturbed was

that of some great lady whose name will never be known. A square shaft led from the surface down to the actual tomb-chamber, filled alternately with various offerings and layers of hard clay. Here again near the surface were a pair of gold daggers and a cylinder-seal inscribed with the words "Meskalamdug, King," apparently in this case an offering consecrated to the dead lady, and beside these the coffin of some humble person, perhaps a servant. When the stone dome of the chamber was reached, the diggers experienced one of those thrills which the modern archæologist has inherited from the tomb-robbers of the ancient world. Sir Leonard Woolley describes how the dome—"had been built over a centring of stout beams which ran right through the stonework, and the decay of these had left half-a-dozen holes in the roof, through which one could glimpse parts of the dim interior and by the light of electric torches, could even see on the floor below the shapes of green copper vessels, and catch an occasional glint of gold." There proved to be five bodies within, four of which were those of male servants sacrificed as part of the burial ritual. The fifth was that of the lady herself, wearing a golden head-dress and holding a fluted gold

tumbler to her lips. But it remained for an adjoining pair of tombs to give a proper insight into the gruesome ritual connected with this type of interment. These were attributed, on the strength of inscribed cylinder-seals discovered in or near the respective tomb-chambers, to two persons called Abargi and Shubad, who were presumed, though they had no title, to have been a king and queen. First Abargi had been buried, in a tomb consisting of a single vaulted chamber. In front of the door was a rectangular open shaft with a ramp leading down to it, and this was filled with the bodies of guards and attendants sacrificed so that they might accompany their lord on his journey to another world. Some of the soldiers wore copper helmets and carried spears or daggers. One had a bundle of four gold-headed spears, and two others each carried four similar weapons of silver. Nine of the women, who seem to have been more nearly Court ladies than servants, wore elaborate head-dresses of lapis and cornelian beads, with gold pendants and "combs," earrings and heavy necklaces. Their appearance can be judged from Woolley's now-familiar reconstruction in the Baghdad Museum. There were also two four-wheeled

wagons with their drivers and grooms, and the skeletons of three oxen between the shafts of each. Many striking objects lay amongst the bodies, including two wooden harps ornamented with bulls' heads in gold or copper, and beautiful engraved shell plaques. Very little was left inside the tomb-chamber, for it had been plundered, a fact which was explained when the adjoining tomb of Queen Shubad was investigated.

[Shubad's vault was built behind that of Abargi at the same level and was exactly similar, only in this case the "death pit" with its human sacrifices was situated above, and extended over the vault of the earlier tomb. It appeared that the workmen digging the shaft had encountered the masonry of the latter and been unable to resist breaking through and rifling its priceless contents. Afterwards the hole in the floor of the death-pit was covered with a great chest which had once contained Shubad's clothes. The array of skeletons here was no less impressive than that below: five soldiers, ten ladies of the Court and a sledge-chariot elaborately inlaid and decorated with animals' heads in gold, silver and lapis lazuli. Two asses had drawn this vehicle into the tomb, and among their

bones there were still traces of harness, including a silver rain-guide surmounted by an admirably modelled donkey "mascot." Here also many interesting objects were found among the bodies of the attendants: an inlaid gaming-board, tools such as chisels and a saw, and a gold drinking-tube for drawing liquid from jars. There was a great pile of offerings comprising masses of copper, silver and gold vessels and an equally large quantity of bowls and jars in marble, alabaster and soapstone. The tomb itself proved to be undisturbed, and more valuable offerings lay strewn about the chamber. A list of them reads like an auction catalogue at Christie's—"a set of silver vessels consisting of a shallow platter, a jug with tall neck and long spout and a number of tall slender silver tumblers nested one inside another: a similar tumbler in gold fluted and chased, with a fluted feeding-bowl (see Plate X, *c*), a chalice and a plain oval bowl: two magnificent lions' heads in silver; the head of a cow in silver: two silver tables for offerings: silver lamps, and two pairs of imitation cockle-shells, one in silver, one in gold (see Plate X, *b*), each containing green cosmetic . . ." and so on.

[Two female attendants were beside the bier,

upon which the queen was laid in all her finery, holding a gold cup to her lips. Her magnificently ornamented wig and headdress have again been portrayed in a clever reconstruction now familiar to most people, but the secondary diadem, which, she had carried with her to the tomb, is equally interesting and characteristic. This consisted of a band of white leather encrusted with lapis beads which served as a support for a series of tiny golden figures of stags, gazelles, bulls and goats, alternating with clusters of pomegranates. In addition to these there were other miniature fruit and flowers of gold and cornelian, and a fringe of little gold palmettes along the lower edge.] One may group the metalwork of this diadem with the fluted gold vessels already mentioned and agree with Sir Leonard Woolley when he opines that "they call for no comment or criticism because they are simply as good as goldsmith's work can be." One might go farther in connection with the fluted vessels, and say that no modern designer with a knowledge of reasoned æsthetics, and benefiting from the technical experience of countless generations of craftsmen, could devise and execute more formally beautiful designs than these cups and bowls.

In the third and largest death-pit the ritual sacrifice had assumed the proportions of a massacre. The bodies of six men-servants and no less than sixty-eight women were laid in regular rows across the floor, the heads of each row resting upon the legs of that above. The only human note which emerges from amongst this shambles is the story of the girl who was late for her last appointment. Having no time to put on her silver hair-ribbon, she had thrust it still coiled into the pocket of her dress, where it was found by the excavators five thousand years later.

Other richly equipped tombs were found without death-pits, and these were assumed to be the graves of persons of royal birth, though not actually ruling sovereigns. One was perhaps that of a little princess who had all the accoutrements of a royal tomb in miniature, including for instance a two-inch gold cup held to her lips. Another was identified by an inscription as the resting-place of "Meska-lamdug, Hero of the Good Land," though whether Sir Leonard Woolley was right in dissociating him from the "king" who dedicated the two daggers seems doubtful. His sarcophagus was guarded only by a row of spears stuck head-downwards in the earth,

yet the profusion of weapons, tools and vessels in copper and gold which were piled in and around it definitely established him as a person of great wealth and importance. His gold helmet or wig, delicately modelled to resemble hair and whiskers, is certainly the most sensational antiquity which ever came to light in Mesopotamia.

From Ur we may now turn to Kish where, in the deep "Y" trenches, traces of human sacrifice were also found in connection with burials belonging to an earlier phase of the Early Dynastic period. The first discovery to suggest this was the remains of a two-wheeled chariot and the skeletons of the oxen which had drawn it. This was at a depth of forty-two feet below the surface, and very little was left of the chariot beyond an impression in the clay of the wooden members. A little deeper, however, a similar vehicle with four wheels was found, again with the skeletons of draft-animals, in this case "a species of equidæ," between the shafts. Here rows of copper nails indicated the shape of the wooden wheels, and the harness was well preserved. It was possible to detect collars, yoke, pole and bridle, and it was interesting to find the functions of traction and guide both properly

provided for. The yoke consisted of a wooden pole across the withers, attached to the top of each collar, and for the purpose of backing a band passed round the breast behind the elbows, joining the yoke at the same point as the collars. The guiding elements consisted of bridle, bit and reins, the latter passing through a double bronze ring fixed to the pole and ornamented, like the one found at Ur, with the figure of a donkey. In the case of another rein-ring a stag was represented apparently "hobbled" from nose to foot, suggesting that some kind of deer had at this time become domesticated.

Some criticism of the principle upon which this type of harness worked is made by a French expert, M. le Commandant Lefèbvre, to whom the details of it were submitted. "As the team moved forward," he says, "they drew upon the collars and consequently the yoke, pole and chariot. But the collars pulled upon the animals' throats and hindered respiration, so that they were compelled to lift their heads in order to relieve their breathing muscles. This is the attitude of all draft animals represented upon ancient monuments, and it is based upon a defective principle of harnessing which prevents the animals from pulling full-

weight, and therefore obtains only a small proportion of their power."

A general description of the common graves here and in the later "A" cemetery would apply equally well to the poorer graves surrounding and superimposed above the royal tombs at Ur. They are merely holes in the ground in which the bodies lie on their sides in a semi-contracted position, holding a cup to the mouth with both hands. Sometimes they are wrapped in matting and secured with long bronze pins or, less frequently, they are contained in a coffin of wood or basketwork. Later there are terra-cotta coffins of the "larnax" type. Around them are their personal belongings which have been buried with them: jars, ornaments and weapons for men; necklaces, bead-girdles, mirrors, etc., for women. In one grave at Kish there was a basin and ewer in bronze. Several have fish-hooks, though never harpoons, a fact which is a little surprising considering the enormous size of the fish bones found everywhere. Finally, in many graves appears the ubiquitous cylinder seal whose impression upon clay would, during its owner's life, have been the equivalent of his signature.

(3) *Other Finds*

In the cemeteries of Ur, Kish and Fara, we have now seen royal tombs crammed with objects of gold, silver and semi-precious stones, and the graves of common people containing well-made weapons and implements, in addition to their personal jewellery. Temples are rich in sculpture and other finely wrought ritual objects, while from private houses we have a series of domestic objects which point to a standard of living by no means primitive. Generally speaking, it is evident that in this Early Dynastic period Sumer had become a centre of wealth and prosperity, so that she could attract to herself the craftsmen of other countries and absorb their knowledge. All the finds which testify to this are worth passing in review, and some which are of doubtful provenance or have not for one reason or another been mentioned in connection with their context call for a detailed description.

First come the statuettes, since to these we owe our knowledge of the personal appearance, dress and coiffure of the now fully developed Sumerian type. Actually there seem to be two racial types represented. Armenoids with "low brows" and prominent hooked noses

are in the majority, but there are also straight-nosed Mediterraneans with tall, narrow heads. Mr. T. K. Penniman, indeed, who examined the skeletal material from the "Y" trench at Kish, was able to make the general assertion that all these bones, which represented sixteen metres of occupation and several thousands of years, had belonged to a people precisely like the present population of Mesopotamia. But this theory is not by any means incompatible with the existence of two separate types. Statuettes in large quantities, as we have already mentioned, were found at Tell Asmar and Khafaje. Ur, Al'Ubaid, Kish, Fara, Warka and Ashur have each produced a few, and now a fine collection is published from the Ishtar temple at Mari. In all this accumulation only minor variations are noticeable on the theme of national costume. Yet in spite of this, to quote Dr. Frankfort, "The problem of Sumerian dress is exasperatingly difficult. . . . We feel inclined to see in the flounced dress one made of sheepskin, and to think that the plain skirt with a row of tassels at the lower edge represents the same garment worn with the wool inside." This would match the sheepskin coat of the modern Arab, which he wears with the fleece outwards when it rains, in order

to protect the soft leather. Only once, however (in a statue of a goat from Ur), is the fleece of an actual animal represented with the stiff, straight tassels of these skirts. Moreover, on the back of one statue from Khafaje they are woven into a quite intricate, formal pattern. Yet the alternative suggestion of leaves stitched on to a piece of cloth seems fantastic, and one of the newly published statues from Mari now appears to have a skirt made of long wavy tufts, the more usual method of rendering the coat of an animal. There is a different garment worn mostly by women which takes the form of a plaid thrown over one shoulder and leaving the other bare. Little distinction, however, is made between the male and female busts.

In the male statues the treatment of hair and beard varies considerably. The long beard and shaved upper lip are almost invariably the rule. In most cases the hair is worn long, parted at the back and hanging in two locks over the shoulders. To judge, for instance, from the gold helmet of Meskalamdug, or a new statue of Lamgi, king of Mari, an alternative when going into battle was to wear it in a tight "bun" at the back of the neck. Priests went naked and shaved the head and

face like servants, while in the bronze statues from Khafaje we see kings or important personages with beards and long hair, appearing naked in the presence of a god. Several fully-dressed statues of men from Mari and Khafaje have a beard combined with a shaved head. There is a quite bewildering variety of female coiffures. The women of Khafaje seem to have encircled their heads with a kind of "halo-plait" from which the hair escaped in front to frame the face in formal waves. There and at Tell Asmar (see Plate II) are instances of a very ingenious and attractive treatment, which consists of a crescent of tightly rolled curls projecting from the head like a tiara, while the remainder of the hair is thrust up behind in a carefully shaped "bun." A central parting is in one case (see Plate II) emphasized by a tiny slip of mother-of-pearl inlay. The northern style represented at Ashur and Mari is to our eyes less becoming. From the latter site there are two heads variously described by M. Parrot as a "coiffure ruchée" and a "coiffure enveloppée dans un filet," but in both cases the hair appears to be rather dowdily bunched into some sort of net. In three other instances it projects on either side of the face from beneath a sort of brimless


top-hat. Statuettes of both sexes have heavy eyebrows often inlaid with a dark material and meeting in the middle. The eyes are also inlaid, the white being usually of polished bone or shell and the pupils mostly of lapis lazuli.

Another craft thoroughly characteristic of the period is the inlaying of figures cut from shell or mother-of-pearl.

Sometimes these are fixed with bitumen into a background of slate or dark stone, at others they form part of a mosaic, with fragments of lapis lazuli for a background. The finer details of the drawing are engraved on the shell with a sharp tool. Sometimes they are very delicately modelled in relief, or beard and hair are recessed and filled in with black pigment. Many of these delicate little fragments have been found at Kish, in the "A" palace, in the square Abu temple at Tell Asmar, and in large quantities in the Ishtar temple at Mari. But again the most complete and best known examples of this art come from the royal tombs at Ur. Here we find gaming-boards, furniture and musical instruments ornamented with exquisite inlaid designs. These often consist of a range of panels separated by bands of checker pattern, each panel containing some semi-heraldic device of

animals and mythical beings. The celebrated "standard" with its triple frieze of little shell figures is valuable to us for more than its decorative qualities, for, like Enannatum's "Stela of the Vultures" from Lagash and the later stela of Naramsin, it is an invaluable document from which to judge of the military equipment and methods of the Sumerians.

A certain amount of expansion and conquest must have taken place under the earliest dynasties, and ultimately sufficient wealth and leisure secured to make possible the gradual perfection of the arts and crafts. Sumer was now definitely a nation with a military status. The king was leader in war. The "standard" shows a well-organized army, consisting of charioteers, heavy infantry and light-armed skirmishers. The chariot wheels are stoutly constructed of wood with leather tyres in one piece with the axle and fastened to the body by leather thongs. The charioteer fights with battle-axe and dagger, while throwing-spears are carried in a wicker quiver in front of him. In the "Stela of the Vultures," the heavy infantry, wearing copper helmets, fight in a phalanx, their rectangular shields overlapping and spears projecting between them. Nearly all these weapons are represented among the



finds from various sites. In addition to these, there are innumerable bronze implements and other objects of a more peaceful nature. The quality of these has improved since the Jemdet Nasr period, for now the Sumerian smith can alloy copper and tin to produce bronze; cast solid objects in a closed mould and even employ the "cire perdue" method which produces an apparently solid object actually consisting of no more than a thin shell of metal. There are single- and double-bladed battle-axes with shaft-holes, chisels, saws, gouges, harpoons, dartheads, razors and daggers with a cast mid-rib and short tang for riveting the pommels. There are numerous kinds of pins and fastenings, some with spatulate heads or shaped like a Spanish comb, others with a heavy spherical head partly made of lapis lazuli, and a variety of sewing needles.

The jeweller's craft was also fully developed. Here (see Plate XVI) is a bundle of necklaces and other ornaments actually found hidden beneath the floor in the Akkadian palace at Tell Asmar, but undoubtedly heirlooms, since they are all characteristically Early Dynastic. There is a wide "dog-collar" necklace, composed of alternating silver and lapis lazuli pieces strung on triple threads of silver wire,

just like those worn by many of the female attendants in the death-pits at Ur. There follows a large silver disc of fine filigree work forming the centre-piece of a three-fold cornelian necklace; a hairband of plain silver, its lower edge ornamented with tiny "drops" of bright cornelian or, occasionally for variety, lapis frogs and seashells; an armlet of silver filigree buttons like the heads of daisies, separated by slips of greenish-blue faience; and finally another necklace of blue faience beads supporting a remarkable series of carved lapis pendants embellished with silver and representing a variety of mythical animals and birds to give protection against evil influences. It is scarcely surprising that gems like these should survive into a later period, and one can imagine them becoming the most cherished possession of the girl who inherited them.

Lastly we must turn to Early Dynastic pottery, of which a vast quantity has been found and fat "corpuses" made of the numerous types. The various vertical "sondages" at Telloh, Fara and Kish threw much light on the many vicissitudes of manner in pot design from the end of the Jemdet Nasr period onwards. But it is the excavation of the twenty Early Dynastic levels of the Tell

Asmar Abu Temple which, when compared by Dr. Frankfort with the corresponding levels at Khafaje twenty miles away and cross-checked by sherds from the two test-shafts in its immediate vicinity, has finally succeeded in producing a complete classification of pot types, representing from beginning to end all the progressive stages in the cultural development of that period. These seem definitely, as we have said, to split up into three distinct sub-divisions, whose existence can at present be detected only in the pottery, but will doubtless be substantiated when more is known of the actual history of the times. It would be out of place here to give more than their elementary characteristics, since in this case one cannot claim that the pottery is of other than technical interest, the pots themselves being for the most part drab in colour and unexciting in shape. Only in the earliest phase (I) does a polychrome ware survive from the Jemdet Nasr period: black designs on buff with a vermilion body-paint, all of which one can rub off with the finger owing to the decay of the albumen adhesive component. Then there is an undecorated plum-red pottery which runs all through Phases I and II and, found always in conjunction with it, an unpainted ware with a last coating of

liquid clay wiped off in parallel stripes. This is popularly known as "Reserved Slip Ware" and seems to characterize these particular strata in all sites: other classes of pottery peculiar to Phase I are wares entirely covered with incised patterns, or decorated with cut-out triangles, and flat-rimmed jars with four pierced lugs beside the rim and a rich incised decoration round the shoulder only. Phase II is marked by the complete disappearance of these last three types together with the polychrome survivals, but there is an important innovation in the form of the "fruitstand" (see Fig. 4), an object which develops an elaborate incised decoration in Phase III. A pot with four little "wing-lugs" on the shoulder runs through all three phases, but in Phase III acquires a rectangular handle projecting from the shoulder towards the rim, with the rudiments of a female torso modelled on it, perhaps originally representing the mother goddess (see Fig. 4).

It is interesting in examining this pottery to see how the notable Early Dynastic finds at other sites fall into these three periods. Phase I finds its parallel at Kish directly above water-level in the "Y" trench. Phase II is represented higher in the same trench and also by

certain tombs at Fara, while the "royal tombs" of Ur, the Al'Ubaid temple and the "A" cemetery at Kish all correspond to Phase III. At Ur many of these pot-forms occur in gold or silver. (There is even a silver vessel from Shubad's tomb imitating a wine-skin down to the stumps of the animal's legs.) Stone bowls also continue throughout all three phases and, being rather more valuable than pottery, are often mended, when broken, with bronze rivets or even lead. Another stone form which may be mentioned here is the macehead. Thousands of these have been found throughout Mesopotamia, varying from plain spherical or egg-shaped stones pierced for mounting on a stick (and therefore often re-used by modern Arabs as the head of a club), to those used for ceremonial purposes which are often freely carved or inscribed.

After enumerating so many other accomplishments of craftsmanship it is hard to leave the Early Dynastic period without some reference to seals. Stamp seals are still frequent, being sometimes made in animal shape—a lion's head or a kneeling calf—but the designs lack ingenuity. It is the cylinder seal which has now come into its own, and is cut in every

material from shell to lapis lazuli. Some fine examples are capped with silver at each end, or even made of solid gold. Patterns have become much elaborated since the simple processions of the Uruk period, and the seal-cutter has developed a quite amazing faculty for draughtsmanship and design, especially in stylizing the forms of animals and adapting them to the exigencies of space-filling (see Plate XII, *c*). A cylinder seal has now become an essential possession for every individual. It was doubtless worn upon a string round the neck, and one can imagine it giving pleasure to an illiterate Sumerian to know that at any time, with a turn of the wrist, he could append his personal signature by imprinting a precise little picture on a clay label or tablet. Two scenes are most often depicted. One is the banquet (see Plate XII, *b*) where royal personages sit holding cups or drinking through tubes from jars, while their attendants bring food and drink and pour libations before them. The other consists of animals struggling together or being attacked by human hunters and mythical beings (see Plate XII, *a*). The variations on this theme are innumerable. But gradually the little hook-nosed figures in their shapeless fleeces who appear at the beginning of the

period are giving way to the neatly stylized figures and formal, heraldic-looking animals of the later dynasties, and beginning to foreshadow the astonishing glyptic accomplishments of the Sargonid age.

V

THE AKKADIANS AND AFTER

IN following the king-lists and other written records of Sumerian history, from the traditional flood down to the beginning of the Akkadian Empire, one is inevitably struck by the infrequency with which these names and semi-historical events are reflected in the actual finds. Yet from the first Dynasty of Ur onwards one notices that here an inscribed macehead and there a tablet will serve to certify some king as having once been a living individual, or even to bring a whole dynasty into line with the known records.

In the earlier stages we are still in the realm of legend, and kings' names are only occasionally known by their association with mythical beings from the great epic poems. Thus in the very beginning, "At Kish," according to the lists, "was the Kingship." Yet in the twenty-three kings of the First Dynasty of Kish, only one name is known elsewhere—Etana, the hero of the popular Babylonian fable of the

serpent and the eagle. In return for eight months' tending of the eagle whose wings had been broken by the serpent, Etana was carried by it skywards on a six hours' journey to the throne of Ishtar. During the course of this flight his reactions to the changing appearance of the rapidly receding earth are amusingly reminiscent of one's first ascent in an aeroplane. But the text is broken just as he "crashes to earth," and we next hear of Etana in another epic as a "denizen of the nether regions." Next the kingship passes to E-anna, the temple precinct of Erech, though rather surprisingly the city of that name was not built until the reign of Enmerkar, the second king of the First Dynasty of Erech. This king also appears in a Sumerian legend, where he assists in the slaying of Zu, the storm-bird who stole the tablets of destiny from Enlil, but representations of this episode on seal-cylinders are our only material evidence of his personality. Then come two names that are frankly gods—Lugalbanda, who was in some way responsible for saving Erech from oppression by the Amorites, and Tammuz, who is more or less the Sumerian counterpart of the Egyptian god Osiris. These two are followed by Gilgamesh, the fabulous hero of the most entertaining epic

in the Sumerian language. Two-thirds a god and one-third human, he is always accompanied in his exploits by a friend called Enkidu, who apparently represents the savage nomad type. The epic, which includes the Sumerian version of the Flood story, begins with the slaying of a demon called Humbaba and ends, after many Rabelaisian episodes, with the establishing of Gilgamesh as one of the judges in the underworld. He is an enigmatic figure around which have accumulated the speculations of scholars of all ages, and appears continually in combat with wild beasts or mythical beings in every form of Sumerian relief-carving. The Latin writer, Aelian, relates the story of Gilgamesh's birth, but adds: "If anybody thinks this is a fable, I admit that, on testing it, I thought lightly of its validity myself." The remaining kings of the dynasty are nowhere else referred to.

We now come to the First Dynasty of Ur and the king called A-anni-padda, son of Mes-anni-padda, whom we have already seen proved to be an historical character by an inscription found at Al'Ubaid, so that the dynasty, if not the names of the kings which follow, carry some weight. After this come dynasties of Awan and Hamasi, about which little is known,

since the sites of these two cities have not yet been located, and a Second Dynasty of Kish where the list has returned to improbable year-figures yet seems a little more authentic in that three of the eight names appear upon various finds. Other rather obscure dynasties follow, a second from Erech, a second from Ur, and a third and fourth from Kish, with dynasties of Akshak and Mari probably running parallel. But from the Second Dynasty of Ur onwards there begin to be also a succession of contemporary "Governors of Lagash," most of whose names are well known from de Sarzec's important finds at Telloh and their exploits from the inscriptions which they have left behind. It is known, for instance, that one of them, called Eannatum, conquered Kish and Akshak, and since the earliest finds at Ur after the end of the First Dynasty include a tablet bearing his name and a statue of Entemena, one of his successors, it seems possible that he fought with or even subjugated a king of the Second Dynasty of Ur. In these circumstances it is difficult to know why the scribes of the chronicles do not dignify them with the name of king or treat them as a Lagash Dynasty, and one can only suppose there was some technical objection. It is

known, for instance, that in later times a Babylonian king could not assume that title until he had performed the ceremonies appropriate to his rank at the New Year's festival, and the governors of Lagash may have failed to qualify in some way such as this.

It is at least certain that the art of Lagash under the earliest governors was rudimentary and provincial. There are, for instance, various *tableaux de Famille* reliefs, in one of which Ur-Nina works as a mason in building a temple to his god and celebrates its foundation with his wife and children, but the figures are arranged in rows without any attempt at design, and an inscription covers the whole background, in some cases running across the figures themselves. With Eannatum's "Stela of the Vultures," however, Lagash has finally risen to the higher levels of Sumerian tradition, and by the time of Entemena there are some statues and an exquisitely chased silver vase which already show signs of a new contribution to Mesopotamian art, and even foreshadow the later Lagashite development associated with Gudea.

Meanwhile a new and significant element is beginning to appear in the king-lists. The later kings of the dynasty of Akshak, and all

those of the Fourth Dynasty of Kish which follows, have Semitic names. Men of Semitic speech are beginning to wrest the authority from the pure Sumerians. At first the land is divided and the northern district acquires an individuality of its own under the name of Akkad. But soon we have a king of Akkad conquering Sumer, and it is once more united, this time under a Semitic ruler in the person of Sargon the Great.

It is natural that many legends should have been woven round an historical character of the calibre of Sargon of Akkad. Since he is said not to have known who his father was, one conjecture is that he was the son of one of the temple prostitutes. The story continues how he was exposed, adopted and brought up by a poor gardener, and eventually became cup-bearer to a king of Kish, Ur-Ilbaba of the Fourth Dynasty. He rebelled against his master and ascended the throne in his place. Another legend makes him a son of Ku-Bau, the fabulous queen of Kish, who was once a wine-seller, and is considered by one chronicler to have constituted a dynasty on her own. But whatever his origin, it is certain that Sargon, finding the country in a state of depression and internal strife, succeeded in welding it together

so that it became the centre of the first great empire of Mesopotamian history. He first of all secured the assistance of Mari as a north-western outpost, then sacked Ashur and conquered the great Subartu plain around Erbil and Kirkuk. Next he subdued the Guti hillmen of the eastern mountains, and finally turned his attention to southern Sumer. Lagash fell and then Ur, so that eventually his soldiers were able to "wash their weapons in the Persian Gulf." Meanwhile raids north of Diarbekr opened the road into Asia Minor, and the upper reaches of the Euphrates, brought him to North Syria and so to the Mediterranean. Soon we find his empire reaching as far as the island of Cyprus, and an interesting story called "the King of Battle," occurring in the Amarna tablets and elsewhere, describes in great detail his punitive expedition into Cappadocia beyond the Taurus mountains, where his merchant caravans had been molested by the soldiers of a local king.

Sargon's successors, Rimush, Manishtusu and finally Naramsin, consolidated the empire, suppressed various revolts of the Sumerian cities and turned their hands to further conquests. The two former were mainly concerned with campaigns against the allied

princes of Southern Elam, commercial enterprises which usually ended in the appropriation of new silver mines or, in one case, "diorite for the making of statues." For the art of carving in stone was steadily improving in technique and increasing in popularity. Naramsin's conquests around Diarbekr, for instance, are commemorated in a great rock relief near that town, and at Susa was found the famous military stela on which he is depicted at the head of his army overthrowing a tribe called the Lulabu. Here, in fact, is a good example of Sargonid art. For instead of a solid background of fighting men against which the figure of the king is thrown into relief—as was the case, for instance, in the Stela of the Vultures—Naramsin himself is here depicted above the heads of his fighting men, and given prominence only by the composition of the group. He is advancing up a mountain, whose peak is among the stars, over the prostrate bodies of his enemies. The regiments of his army are quite adequately represented by a few soldiers carrying various standards, and the forests of the foothills by two single trees.

But in addition to such isolated works of art as this, we must observe how the Akkadian

supremacy is reflected in the remains of the ancient cities. Although no really first-class invention or discovery is observable during the Sargonid age, yet there are changed tendencies in most of the accessories of everyday life. Sir Leonard Woolley noticed this in some of the upper graves in the Ur cemetery which were later definitely attributed to the Akkadian period. The pottery had greatly changed in quality. Not only were the forms new, but much more care and attention appeared to have been expended on their manufacture. This he took to be a sign of decreasing national prosperity, since pottery might only assume such importance when metal or stone became unobtainable for making vessels. Yet amongst the contemporary graves was at least one suggesting considerable affluence. The fashion in men's head-dresses at the time consisted of an oval plate of gold laid upon the forelock and attached by twisted gold ribbons, and this gentleman wore no less than six of these. He also had gold bracelets, finger-rings and beads, a single earring and a goat amulet finely cast in gold. From an Akkadian level in Dr. Campbell Thompson's shaft beneath the Ishtar Temple at Nineveh comes the magnificent bronze head illustrated in Plate I, now in the

Iraq Museum. Other interesting relics of the period took the form of cylinder-seals inscribed with the names of various servants of King Sargon's daughter, a lady who was evidently consecrated to the service of Nannar, the Moon God, and acted as high priestess in her temple at Ur. This provides a rather striking picture of Sargon recognizing the sanctity of the conquered Sumerian city, and sacrificing his daughter as a token of his sincerity.

Building methods had also changed and one notices, particularly at Tell Asmar, an increased generosity of planning and solidity of construction. The Akkadian palace excavated on that site (see Fig. 2) is a well-preserved and probably characteristic example of contemporary architecture, and embodies many new and improved ideas, including ingenious arrangements for sanitation. One may take this building to be an elaboration of an ordinary domestic plan, but in addition to the normal private-house element, it has a separate and self-contained harem wing and a group of fairly commodious rooms for servants and guards. Large rectangular bricks of more or less modern proportions are now used, and the outside walls of the palace are more than a metre thick. Many rooms have pavements

and low skirtings of kiln-baked bricks. The main entrance to this building is rather significantly hidden away in what was apparently a narrow, vaulted street, an arrangement obviously intended to make it less easy of approach in case of the city being taken and entered by an enemy.

Nevertheless, one gets the impression that owing to some contingency of this sort, the royal family had been compelled to leave hurriedly. For, just as in the burnt house of a temple official at Khafaje, every room revealed intimate little details of domestic life in exactly the state in which they had been left. No actual valuables were found, except the bundle of jewellery already described in an earlier chapter, and that had been carefully buried beneath the floor of the principal living-room, beside the raised dais where the family would sit. Adjoining this room was a private courtyard with bedrooms leading off it, a guardroom and a kitchen with a great baking oven and much pottery. The main outer courtyard was forty feet square, and beyond it, approached from behind a screen wall, was a paved bathroom and a range of no less than three toilets. These toilets were built up in a baked brick over a vaulted drain. They

occupied niches in the wall, and one was covered with a shaped bitumen seat. There was no receptacle provided for sand as was the case in similar privies at Tell-el-Amarna, but a large earthenware pot and a paved area directly in front of them, laid to a fall, suggested the use of water. One of the three had apparently proved superfluous and had accordingly been used as a store for pottery; it contained an enormous quantity of various types of beakers. The bathroom also was paved and tiled with burnt brick. On one side was a small raised platform with a large water vessel built into it. This contained a pottery dipper and some lumps of baked clay, and one may imagine that these latter were brought hot from a fire and thrown in to heat the water, which would then be scooped up and splashed over the bather by a slave. It was amusing to find part of a necklace of cornelian beads in the mouth of the bathroom drain.

All these rooms in which water was used, including a fourth toilet in the harem and a fifth in the servants' quarters, were ranged along one side of the building, and vaulted drains led from them out into a main sewer in the street. This was an impressive affair

covered with a well-made barrel vault of bricks and big enough for a small boy to crawl through for cleaning purposes. A very modern detail was what is to-day called an "inspection eye," at a point where a smaller drain joined it, so arranged that after lifting a flat tile in the floor a cleaning rod might be used. A photograph of the street adjoining the palace after the main sewer had been exposed bears a striking resemblance to a similar photograph from Sir John Marshall's excavations at Mohenjo-daro in India, which, as we shall presently see, there is every reason to believe belonged to an exactly contemporary period.

The harem, as we have already mentioned, occupied the most secluded wing of the palace. It was approached through several ante-rooms, and one entered by a narrow door into an outer courtyard where the ashes of a fire round which the guards had sat were still visible. Beyond there were half a dozen rooms grouped round an inner court. One had evidently been a kitchen, another a storeroom and a third was a toilet. But all were filled with a great variety of domestic objects. There were bowls, bottles, beakers, dishes and great earthenware jars sunk in the ground for storing meat or grain—their mouths usually

covered by a saucer. Another similar jar was set in the ground to drain a small raised pavement evidently serving the purpose of a sink. There were various grind-stones or hand-mills, bone spoons and forks for eating, one or two stone club-heads belonging to the servants and a pottery flask or "pilgrim bottle" of a shape, round on one side and flat on the other, convenient to tie to a man's girdle when going out to work in the fields. The largest room was divided by a screen-wall into two compartments. The inner one was fairly certainly a bedroom, since it contained all the accessories of a lady's toilet: a little set of bronze implements, including "eyebrow-pluckers" and instruments for manicure, suspended from a ring, exactly matching a set in gold with a filigree case found at Ur; cockle-shells filled with "eye-black," a lump of iron-oxide for use as rouge on the cheeks, an ivory comb, and the inlaid of an ointment pot. The outer compartment gave some indication of how this lady spent her leisure hours. In the corners were little piles of mussel and other varieties of shell, while the floor was littered with tiny triangular and diamond-shaped snippets of mother-of-pearl cut from their nacre lining. There were also thin sheets of

dried bitumen upon which they were to be arranged as an inlay-pattern, and here and there a discarded fragment of the finished work. The blade of a fine bronze knife was perhaps the tool with which the inlay was cut. One is led to infer that this particular craft was considered a genteel occupation for a young lady, like needlework in the last century.

Very little could be recovered from the guards' and servants' quarters beyond the courtyard at the north end of the building, since here the mound was denuded almost to floor level, but they also had been provided with a bathroom and yet another built-up toilet.

In the angle of the palace building an Akkadian architect had rebuilt the little Abutemple upon its old ruins. He retained the plan of the Early Dynastic shrine, but divided it into two compartments with a narrow arched doorway between on the main axis. The whole of the inner room, including its floor, was carefully plastered with white gypsum, and a little offering table had been erected in the centre. In a cavity beneath the altar were found the bones of small animals, fish, birds and the horns of a gazelle, all of which had been sacrificed in the process of consecrating the new sanctuary.

The outer chamber produced one surprising find (see Plate XIII, *c*). This was a large and very finely carved cylinder seal, depicting a scene which can unquestionably be identified as Hercules slaying the Hydra. Four of its heads are already effectively dealt with and hang limply down, while the remaining three still menace the hero with forked tongues. Flames already spring from its body, reminding one that in the Greek myth the monster was vanquished by fire. This increases the antiquity of the Greek character by about two thousand years, and suggests for him an oriental origin previously unsuspected.

Another seal-cylinder found amongst the filling of the Akkadian palace was of even more momentous importance. But to appreciate this we must turn for a moment to Sir John Marshall's excavations in the Indus valley. Here at Mohenjo-daro and Harappa he had encountered the remains of an advanced civilization which flourished in remote antiquity. The pictographic script is undecipherable, and though there were traces of trade connections with Sumer, these were inconclusive from the point of view of dating; so that until the day the excavations closed it was still impossible to attribute the Indus civiliza-

tion to any specific period. Sir Leonard Woolley at Ur had found a certain type of etched cornelian bead and some stamp-seals, all with Mohenjo-daro affinities, but since these occurred in graves, the dating was still uncertain. Here at last, however, at Tell Asmar in a stratum accurately datable to the Sargonid period, was a cylinder seal (see Plate XIII, *a*) producing a picture every detail of which was alien to Mesopotamia, but which had exact counterparts among the finds at Mohenjo-daro. It represented a procession of foreign beasts, an elephant, a rhinoceros and a crocodile, unmistakably Indian in style as confirmed by Dr. Mackay, the Field Director at Mohenjo-daro, and thus seem to be an object imported into Akkad by some Indian merchant. This discovery once and for all fixed the date of the Indus valley civilization at the middle of the third millennium. Moreover, it was later confirmed by other finds of Indian origin: more etched beads, a particular kind of bossed pottery and a rather beautiful sketch of the head and shoulders of an Indian zebu scratched on a slab of stone.

Something further must be added concerning the seals from Tell Asmar for, from the private houses of the Akkadian period adjoining the

Abu temple came a really magnificent collection of Sargonid cylinders. These excel in design and the miniature technique of their carving (see Plate XIV, *b*). In addition to the simpler "heraldic" groups of animals and human figures which we have seen in the preceding age, and which are now drawn with an increased confidence and efficacy. Religious episodes are also depicted. The most difficult combinations of mythical figures and their symbolical attributes are deftly fitted into the pattern, and seals acquire a new literary aspect. This is important, since they are able to throw a great deal of light upon the religious beliefs of the worshippers in the neighbouring Abu temple.

On the copper "service" belonging to the temple Abu was given the title of "Lord of Vegetation," and all the representations on the seals can be fitted into a consistent picture of which the central figure is just such a deity, connected not only with the success of the crops, but also with the general fertility of flocks and herds. In the later Babylonian pantheon Tammuz and Ninurta also have this title, but Tammuz is also "Lord of the Sheepfolds," and "shepherd" Ninurta, or Ningirsu, is "Lord of Plants," and his emblem, Imgi, the lion-

headed eagle, occurs repeatedly amongst the finds in the Abu Temple. Other emblems on seals serve to identify Ningishzida, also god of fertility; so that we come to suspect that all these names, Ningishzida, Ninurta, Ningirsu and Tammuz, are merely different aspects of a principal god, Abu, who symbolizes the generative force in nature. And here a point occurs which seems to be leading us to the basic facts of Sumerian religious thought and the innermost sanctuary of contemporary ritual. This is connected with the great New Year's festival, around which the whole of Sumerian religious life was centred. Various texts discovered at Lagash describe in full how the marriage of Ningirsu with the goddess, Bau, was consummated on New Year's Day with the explicit purpose of insuring the fertility of the crops. Now, one of the only sculptures discovered in the Akkadian Abu Temple was a fragment of a relief which depicted this very scene, only the protagonists were quite obviously human and the ceremony was presided over by a standing priest. This picture was repeated in detail on a cylinder-seal found among the houses. All research in connection with this oldest Mesopotamian ritual is leading to the conclusion that the two figures here

represented were a young priest and priestess chosen each year for this purpose and becoming thereafter identified with the god and goddess.

From the earliest times in Sumer, for instance, the word "Bal" before a name refers to the holding of an office by an individual for a certain period only. This may imply that on certain occasions it was the king and queen who assumed the rôle of divinities for a period of time, terminating in their superannuation at the New Year's festival. For we know that in later times a king had invariably to present himself before the god at the New Year without his insignia as candidate for re-election. At the end of the year, then, came the all-important festival. A great procession would escort the chosen pair to the temple, situated in the larger cities at the summit of the *ziggurat*. Sacrifices would be made, there would be a feast, and a marriage would take place before a high-priest, symbolizing the advent of fertility to the land. For in a country where the indispensable winter rains occurred for a few days only each year, who could be sure that without some ceremony such as this they might not some day fail to materialize altogether?

In one's imagination the atmosphere of this

great annual festival is tense and vivid. Beneath the pale winter sunshine the vast, cultivated plain of Mesopotamia lies waiting for the rain. On all sides it stretches to the farthest horizon, the monotonous skyline relieved only where a great city is reared upon its artificial mound and crowned by a stage-tower and tiny temple. Each of these *zigurats* is remotely visible from the next. Eridu, Ur, Larsa, Erech, Shuruppak, Adab, Nippur and many others form a chain of temples, where the preparations for the festival are reflected in the waters of the two rivers, or perhaps in some wide irrigation canal. A signal is given from city to city by the smoke of sacrifices, and the great fertility rite begins. Once a race of mountaineers, the aspiration of the Sumerians is to rise above the flatness of their surroundings and sublimate the function of their most sacred ritual upon a "high-place," which is in this case the work of their own hands.

But what should become of the man and woman who had thus temporarily personified deities in order to play the divine rôles in the ceremony? They could not surely return to normal human existence when a new pair were selected to take their place. One is tempted to

think that it is they who are buried with so much pomp and magnificence in the vaulted tombs at Ur, and that they met their end in the same way as the attendants and animals who were buried with them. The whole ritual may in fact have constituted the final scenes of the New Year's ceremony.

But to return to the seals, there are other recognizable gods from the Akkadian pantheon who occasionally make their appearance. Shamash, the Sun God, pilots his boat from west to east through the waters of the night. (See Plate XIV, *a*.) Sometimes stars show that it is night, and fish swim in the water. To suggest that the boat moves of its own accord, the prow is shaped like a human figure holding a punt-pole. There are other emblems, such as a plough which suggests his connection with the crops, and a human-headed lion to ensure his victory over the powers of darkness, all fitted into the quaintly complicated little picture.

Another scene (see Plate XIII, *b*) would be more difficult to explain if something were not already known of the mythological episode which it is an attempt to portray. The god of fertility has "descended beneath the mountain," the latter being rendered in various ways,

but usually by a simple outline framing the figures inside. The Mother Goddess has followed, and kneels to raise him up and bring him back, for on the earth above the Sun God is destroying all the vegetation, tearing up plants with his hands. Sometimes Abu is depicted returning from the mountains with his gift of irrigation, and fish swim in the streams of water which flow from him on either side. At others Zu, the tiresome storm-bird, is being slain again to fill a gap in the pattern.

But among the finds from other sites we see at this period a fairly well-defined pantheon of male deities, the females tending to become confused owing to their common attribute of mother-goddess. The king is always "Ishakku," which literally means tenant-farmer. He holds the land only in trust for the gods to whom it belongs.

The Akkadian period was one of the peaks of Mesopotamian prosperity, yet the pure Sumerian culture was already corrupted and changed by Semitic and other foreign influences. The Akkadian supremacy ended in confusion. The warlike Gutian tribesmen from the mountains in the east overran the land, breaking up the old union of states and establishing themselves in control of large areas.

The chronicles become hopelessly involved. There are fourth and fifth dynasties of Erech, but their kings reign always in the shadow of the Gutian invaders. "Who was king? Who was not king?" the scribe ironically inquires. For ninety years and forty days they held partial sway over Mesopotamia. The lists enumerate twenty Gutian kings (the last of whom, Tirigan by name, is responsible for the odd month-and-a-half, only forty days being attributed to his reign). But it is quite evident that the principle of kingship was foreign to these tribesmen and that they were only able to exercise their authority over certain parts of the country. In Lagash, for instance, a succession of prosperous and efficient native rulers is recorded during the Gutian period, and these have left their mark upon the history and art of the times. The first of these, Ur-Bau, built a temple and dedicated a diorite statue of himself which is now in the Louvre. But the greatest of all was Gudea, who governed Lagash for a long period about 2300 B.C. and is for us one of the best-known characters of Sumerian history. He brought great prosperity to the Lagash province, and it is a significant fact that he was able to maintain very extensive commercial connections with other

countries, a fact which suggests that although Sargon's empire was no longer controlled by one man yet the Akkadians were still able to keep in touch with its most distant outposts. The names of places in North Syria, in Elam, and far to the south around the Persian Gulf are all mentioned in Gudea's numerous inscriptions as providing materials which were used in the temple which he built to his city god. He even records having obtained gold dust from Cilicia in Asia Minor. Moreover, innumerable private business letters and other documents amongst the tablets of the period testify to an efficient organization of internal commerce.

But it was as patron of the arts that Gudea excelled. There are in existence a score of statues of him, and most of them bear inscriptions by which they can be identified. More than half of these were found by de Sarzec at Telloh and now grace the galleries of the Louvre, and it is interesting to recollect that for the first two decades of the present century these statues and the fragments of bas-reliefs which accompanied them were considered the criterion of Sumerian art. In point of fact, this Lagashite period stands in relation to the main epoch of Sumerian culture as a kind of

Indian Summer. It is not a pure Sumerian product at all, but the fortuitous result of an infusion of Semitic ideas. Nevertheless, these statues have a new strength and decision. They are all of smooth, hard diorite, and retain much of the quality of the great boulders from which they are hewn. A typical dictator, vital and dominant, Gudea stands four-square upon the tradition of his country, in the face of the Barbarian invader. One of the finest fragments is known as the "Tête au Turban," a head with a most engaging profile, perhaps partly due to a fracture of the nose (see Plate XV, *a*.) Another is a headless seated figure called by de Sarzec the "architect au plan." Here Gudea is depicted in his capacity as temple-builder. There is a similar statue of his son, Ur-Ningirsu, and in the British Museum the magnificently preserved upper part of a standing figure of an unnamed governor of Lagash (see Plate XV, *b*). He is bald, clean-shaven and wears a thin garment draped over one shoulder only, exposing the muscular shapeliness of his right arm. This and the remainder of the figure is rendered with an eye for that decorative formality which is indispensable when carving in a hard stone and aiming at a smooth finish.

Men of this stamp ruled in Lagash long after the last Gutian king had been defeated by an Erech general and his people driven back to the mountains. The end of their line came only when, for the third time in recorded history, the city of Ur assumed the hegemony of the plain of Shinar. Ur-Nammu, a local governor, rebelled against Erech, and after a series of victories brought the whole land under his control. Eventually, aiming at what might be considered a Sumerian revival, he was successful in reconquering nearly all those countries which had formed part of the Sargonid empire, so that his dominions extended from the Persian Gulf to the Mediterranean. He was a great statesman and lawgiver, but above all a builder. At Ur he at once proceeded to enrich and extend the shrines and secular buildings of the temple precinct, and the surviving ruins which bear the stamp of his dedication reveal an entirely new standard in architectural scale and solidity.

Most important of these was the complex of buildings composing the great temple of Nannar, the local god, of which a prominent feature was the mighty *ziggurat*. This latter was a really magnificent piece of building.

Two hundred feet wide by 150 feet deep, it consisted of a solid mass of brickwork—sun-dried brick in the centre—and outside, an eight-foot revetment of kiln-burnt brick laid in tough bitumen. The walls were ornamented with shallow buttresses and sharply battered so as to give an appearance of stability and height. It was built upon a wide terrace level, with the roofs of the chambers surrounding the great temple courtyard which lay before it, and its own upper storeys were approached by a “*scala sancta*” consisting of three monumental staircases, each of a hundred steps, one projecting axially from the main façade, and the other two built up against it on either side. Towering above the surrounding buildings it rose in a series of receding terraces, and was crowned with the type of shrine which is now familiar as the holy of holies of the Sumerian cult.

In the process of excavating and measuring this structure Sir Leonard Woolley became aware of a number of subtleties in its design which might have eluded a less observant excavator. Thus he records that “in the whole building there was not a single straight line, and what we had assumed to be such were in fact carefully calculated curves.”

This immediately recalls the Parthenon, where perspective effects likely to be detrimental to the design are artificially adjusted with such mathematical precision. Yet the treatment of so vast a mass of rough brickwork in this way must have presented a far more formidable problem than the carefully gauged stonework of a Greek temple, and have involved the use of more accurate and effective instruments for surveying and setting-out than one would have credited these Sumerian builders with possessing.

There is another example of Sir Leonard's faculty for keen observation and deduction. In the smaller temple of Gig-par-ku, situated at the south-east corner of the *ziggurat* terrace, there was found an inscription of Nabonidus mentioning that he cleared Gig-par-ku of "fallen branches." Woolley's deduction is that these branches had fallen from the *ziggurat* itself (though admittedly there is a fairly wide expanse of main terrace between the foot of the tower and the presumed site of this subsidiary temple), and he accordingly puts forward the ingenious suggestion that the upper terraces of the *ziggurat* were not paved, but bedded in soil and planted with trees. This, he suggests, would explain the weeper-

holes in the main façade, a precaution hardly necessary against the small amount of water which would percolate through pavements of baked brick, and also those long vertical slots in the façade buttresses which may in this case have been used for hoisting water to the upper levels as well as for draining it away. In these circumstances the general appearance of the structure becomes a little difficult to picture. One can only compare it, for instance, with the Castello Angelo in Rome, which must in its time have produced something of this "hanging garden" effect. At least it may have enhanced the idea of an artificial mountain which lay behind the earliest conception of a *ziggurat*.

Four successive generations of the house of Ur-Nammu occupied the throne of Ur, and during their reigns the scattered states were once more consolidated into a nation and a high standard of culture attained. Apart from the architectural activities of the kings themselves, new and better buildings appeared in every city. In the provinces patesis, or local governors, erected substantial palaces for themselves and dedicated temples to their own gods or the gods of the mother-state. Prominent citizens built themselves large and comfortable

private houses, whose remains suggest a standard of living greatly surpassing that of the preceding ages. A system of new irrigation canals was cut, and in many cases ceremonially opened by the king himself. An inscription on one stela gives a list of canals in the Ur neighbourhood for which Ur-Nammu was responsible. He claims credit himself only for the earthworks, and renders thanks to the gods for the blessed gift of the actual water.

The dead are now buried beneath the floors of private houses. Sometimes these are large enough to include a private chapel, complete with altar and niches for a "household god," and in this case it is in a vaulted chamber beneath the chapel that a newly deceased member of the family was buried. He would be laid on his side wearing his clothes and trinkets, holding, as always, a cup of water to his mouth. A number of pots containing food would be left for his use, and the door of the tomb would afterwards be bricked up. When another member of the family died, the older bones would be unceremoniously bundled into a corner to make room for the newcomer. In similar tombs of a slightly later period at Ur ten or more bodies were often found in one family vault, and beneath the floor of one

private chapel there were the graves of thirty children. In cases such as these one can only suppose that the house would ultimately become uninhabitable. In this case it would probably be abandoned by the family and used only as a mausoleum.

A group of public buildings at Tell Asmar dating from the end of the Third Dynasty of Ur embodies almost every feature, architectural and otherwise, which is characteristic of this period. It comprises a large square temple, simply but substantially built—the walls are in some cases more than ten feet thick—dedicated by a local governor to Gimilsin (a deified king of Ur, and one of the distinguished descendants of Ur-Nammu), an administrative palace and a smaller temple or chapel consecrated to the worship of a purely local deity called Tishpak. The author's restoration (Fig. 6) will give some idea of the rather attractive grouping of these buildings along one side of a paved *piazza*. The Gimilsin temple is built on the "southern" principle of planning. One would enter on the main axis of the building through an arched and double-rebated doorway between two impressive towers ornamented with long vertical chases such as are characteristic of all buildings

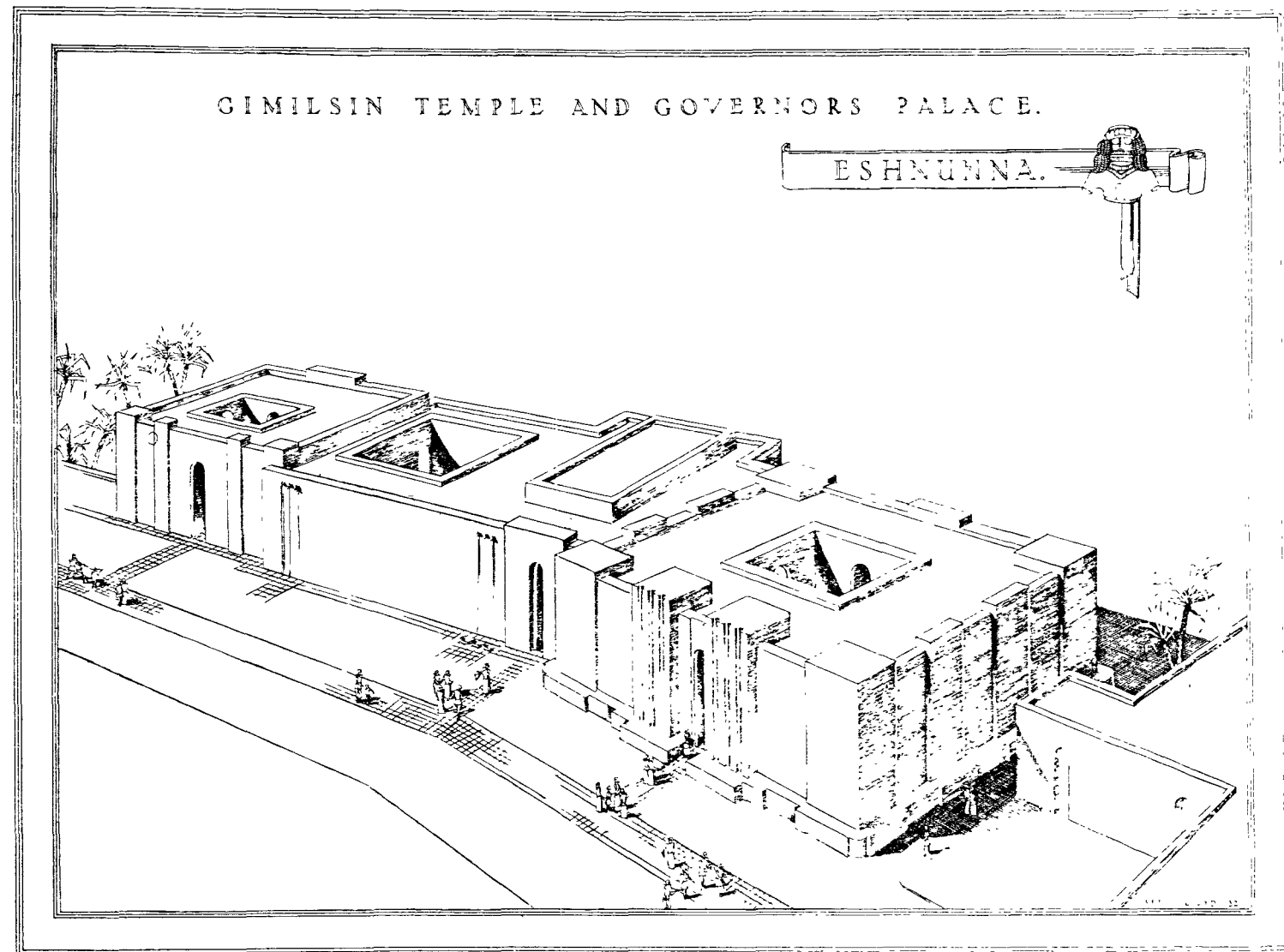


FIG. 6.—Restoration by the author of a group of public buildings at Tell Asmar contemporary with the Third Dynasty of Ur.

of the period. These would accentuate the vertical treatment of the façade, and, added to the tall proportion of the archway, would make an impressive entrance. One's line of vision on entering extended through a vista of similar archways to the great doors of the sanctuary which, when thrown open, would reveal the cult statue in its niche.

Over four hundred tablets were found in the entrance vestibule where, no doubt, sat a scribe to attend to the temple accounts. Many more were found elsewhere, particularly in certain rooms of the palace which had apparently been used to house the state archives. There is at this period a type of drain which consists of a succession of tub-shaped sections of terra-cotta placed one above the other, and one of these was found literally packed with tablets, varying from lists of the names of workmen to contracts between important personages, each side of the agreement written at one end of the tablet and the seal-signatures of both parties in the centre. Occasionally fate had preserved a document of a more human character. One of these was a letter to the governor, apparently from his mother-in-law, beginning, "How many times am I to write and receive no reply? . . ."

These buildings are constructed of large flat

sun-dried bricks about fourteen inches square, and most of the rooms are furnished with pavements and skirtings of similar bricks baked in a kiln. In every room which constitutes an entrance lobby there is a special pavement with a drain beneath for washing the feet, an important preliminary to entering a building of this kind.

Perhaps the most sensational discovery was in the sanctuary of the Gimilsin temple where the two pivot-stones which had supported the great wooden doors were still in place. Each of them was ornamented with a clear-cut inscription in cuneiform writing quoting the governor's dedication of the building to the deified king of Ur. It is interesting to remember that in a similar building at Ur, although the walls were denuded to floor level, the bronze shoe into which the pivot itself had been fixed, and which was also inscribed with a dedication, had not even lost its balance upon the pivot-stone though the wooden pivot had decayed and disappeared many hundreds of years before.

Another feature of this sanctuary was a large bell-shaped object of terracotta partly buried beneath the floor directly in front of the altar.

This appeared to be some sort of pot-stand, and from near its head a small pottery drain ran into the ground, terminating in another buried clay vessel. The explanation of this arrangement is probably to be found in a fragment of a relief discovered at Ur and dating from the time of Ur-Nammu. Here the king is depicted in the presence of the god and appears to be performing some important ritual. Between the two is a date-palm growing in a complex clay vessel whose lower member would exactly correspond to the exposed part of that found before the shrine of Gimilsin. The king is in the act of pouring a libation over the plant, a fact which almost certainly explains the small drain found near its head; for by this means the holy water would not be lost, but merely drained away into a small vessel buried beneath the floor for that purpose. This libation probably symbolized the irrigation of the land.

Besides this fragmentary relief and a few even less well preserved, the surviving works of art dating from this period are extremely few and unsatisfactory. Cylinder seals are still found in fairly large quantities. There is an improvement in the precision of their cutting,

but the designs have lost most of the freedom of the Akkadian period, and become somewhat monotonous and stereotyped. The scene almost invariably depicted shows the owner of the seal being led by the hand and presented to a seated god by his heavenly patron. The finds which occur in greatest abundance are terra-cotta figurines. These include toy-chariots with horses and other quaint animals, small plaques representing various religious figures which are usually made in an open mould, and great numbers of little conventional figures of the Mother Goddess modelled in the round. From their numbers one can only conclude that these were offerings made at a shrine by poorer people.

The dearth of any sculptures in stone or, for that matter, any other serious work of art is striking, and one can only conclude that the national impulse in this direction was on the wane. In retrospect, it was the Early Dynastic period which had seen the culmination, if not the decline, of Sumerian sculptural achievement. The Sargonid age had introduced imperialism, with its consequent improvement in quality of imported materials and the technical perfection of certain forms of craftsmanship. Lagash had evolved a highly developed

yet hybrid outcrop of the Sumerian art tradition. But from that time onwards the accomplishments of the Babylonians consist only in the elaboration of ideas inherited from earlier epochs.

CONCLUSION

IN view of the great quantity of sculpture which has been mentioned in the preceding pages, we should now perhaps consider Sumerian art from a purely critical point of view, when dissociated from its historical connection, and here is a subject which one approaches with a certain diffidence. Contacts between archæologist and art critic almost inevitably produce friction. Yet it has been interesting in recent years to notice the sometimes successful intrusion of the one upon the sphere of the other. It begins to be a little puzzling to know why the study of a subject which is, after all, mainly concerned with the history of art and culture generally, should exclude a scholar from interesting himself in the process of abstract reasoning which constitutes art criticism, or from assimilating the main bases of criticism which would enable him to make an intelligent appraisal of any work of art, ancient or modern. Here, however, is the view of an art critic, Mr. R. H. Wilenski, expressed in a recent book on modern sculpture:

“Archæologists are people whose business it is to examine objects of the past and documents relating thereto with real care and thoroughness and to record *without omissions and without comment* the knowledge thus obtained.

“When they stick to their business, as they occasionally do, they are useful to historians and critics.

“But they usually indulge in art criticism for which they are not equipped by their studies. . . .”

Thus we find Sir Leonard Woolley prefacing his newest book on Sumerian Art with a modest disclaimer. “This is not intended,” he says, “to be a critical appreciation of Sumerian art—for such a task I do not hold myself competent and should prefer to leave it to experts; my whole aim has been to show what were its sources and to trace its development as influenced by accidents of history. Some such introduction will, I believe, help towards the understanding of an art whose ideals and conventions are necessarily unfamiliar and may prepare the way for the critic’s more considered judgments.”

Again one finds the same note in M. Zervos’ introduction to his new “Cahier d’Art” volume with its magnificent photographs of

Sumerian sculpture. "On ne trouvera dans ce volume, pas plus que dans le précédent, des appréciations scientifiques sur l'art étudié. Des savants de haute érudition, tant en France qu'en Angleterre, en Allemagne et ailleurs, ont parlé de l'art de Basse Mésopotamie dans d'importants ouvrages qui apportent des connaissances étendues en même temps qu'ils procurent un très vif plaisir."

Yet where can one find *importants ouvrages* on this subject other than purely technical archæological publications? One can only return to Sir Leonard Woolley's book and observe those passages where he has overstepped his own self-imposed limitations and embarked upon what is quite frankly abstract criticism. Here one is immediately faced with a succession of apposite and concisely-worded comments which, *qua* criticism, are surely irreproachable. There is, for instance, the gold and lapis lazuli head of a bull from a lyre found in one of the "royal tombs" of which he remarks: "Very few people, looking at it, have noticed the absurdity of a bull having a beard, and a blue beard at that; the only impression they have got is of strength and dignity—precisely the impression which the artist wanted to convey." In con-

trast to this, consider his reaction to the Gudea statues in the Louvre and British Museum: "Certain conventions, artistic as well as technical, survive; the clumsy block behind the feet still supports the weight of the standing figure, the elbows are grotesquely pointed, the head as a rule disproportionately large, the shoulders unduly broad and square with the head on its short neck sunk between them; there is little or no undercutting of the stone, nothing to mitigate the rigid pose of the figure still so little regarded as such that it can be treated as a mere field for inscriptions. On the other hand, the modelling of the exposed parts of the body is admirable, and the polished surface of the stone, by the interplay of lights on its contrasted curves produces, as in the British Museum fragment (see Plate XV, *b*), an astonishing illusion of flesh." And later: "They are portraits up to a certain extent, so that Gudea the young man has a freshness and a vigour very different from the serenity of his middle life or the drawn severity of his old age; yet it is difficult to see quite wherein that difference lies, for there is no realism in them at all." Here he would almost certainly fall foul of Mr. Wilenski. Let us hear that "critic's more considered judgment" on the

subject of these very statues: "Modern sculptors," he admits, "have been much impressed by Sumerian sculpture. They set aside, of course, the archæologists' prattle which describes these (presumably Gudea) figures as portraits. The Sumerian sculptors were obviously not attempting to convert the stones into the likeness of Gudea or anyone else. These statues are no more portraits than the statues of the Pharaohs or the Assyrian Kings are portraits. They are not particularized representations of individuals. If the sculptors had wanted to make life-like likenesses they would have of course done so . . . but the sculptor who had done this in ancient Egypt, Assyria or Sumeria (*sic*) would have been headless in ten minutes. The sculptor did what he was required to do, which was to collaborate with a block of hard stone and to convert it to a form which would suggest in a symbolic way certain qualities in the prince and his office, which would make men revere and respect him. . . ." Finally he concludes that "the formal meaning of Sumerian sculpture is the meaning of the mutual play of angular and curved forms which constitute a formal architecture peculiar to themselves. The cubic form of the clasped hands in the

British Museum statue is continued in the flatness of the front of the arms and the sharply defined angles of the side planes. The gesture is given permanent meaning by the form."

This seems fairly coherent, except that his "formal architecture" and "cubic form" can easily be attributed to the technical limitations of the material, and one need not credit the sculptor with the conscious intention of giving meaning to the gesture. Meanwhile Mr. Wilenski aligns the British Museum piece with a modern work by Henry Moore called "Mother and Child." He proposes to judge both by the same standards, or rather to treat them as mutually explanatory. But he writes of Mr. Moore: "He believes that permanent shapes in permanent materials must symbolize universal and permanent ideas. . . . He admits no meaning resulting from particularization; all local and topical experience is excluded from his work. His concept of truth in sculpture is the organization of stone form as a symbol of life."

Surely this is the comment of an intellectually rather muscle-bound *littérateur*, and is concerned with an art in the last stages of what another critic calls "self-consciousness, inbreeding and exhaustion."

Most Sumerian sculpture, on the other hand, is not the work of artists, far less of intellectuals. Like the ornaments of Gothic cathedrals, it is the work of good craftsmen, carving to the best of their ability because they are afraid to do less, but also carving in a manner strictly prescribed by tradition; a manner evolved for them by many generations of predecessors, influenced now by the technical possibilities of new materials, now by the ever-changing standards of, let us say, human appearance. Any fine abstract quality which a modern critic may detect in their work is due to the accumulated technical experience of a whole race, rather than to the artistic conception of individuals. Perhaps it is the study of this very process of evolution which is pre-eminently the concern of archæologists, on account of their knowledge of its cultural background. And it is not altogether surprising if this study occasionally leads them to the wider issues involved in the process of pure abstract criticism.

When the group of statuary discovered at Tell Asmar and Khafaje in the spring of 1934 began to assume such unexpected proportions, it became clear that it constituted an important new phase in the early history of

sculpture. Dr. Frankfort therefore determined to pass the whole group in review and endeavour, by applying some sort of formal criticism, to dissociate the various styles which are represented, to attribute to each a motive and assign it to its appropriate place in the evolution of contemporary art. This he did with considerable thoroughness in a recent article in the *Burlington Magazine*. He begins by pointing out the importance of Sumerian sculpture, generally as representing a new aspect of the pre-Greek art which has up to now been almost exclusively thought of as connoting Egyptian art, simply because no other early civilization had till recently produced anything like the wealth of achievement discovered in Egypt. He recalls the pre-occupation of the pre-Greek artist with non-organic forms and his tendency to approximate the spatial arrangement of a statue to some familiar geometric shape, and accordingly contrasts the universal tendency among Egyptian sculptors to treat the cube or rectangular block as their predominating unity, with the Sumero-Babylonian preference for cylindrical or conical shapes. This will explain the fact that a seated figure is such a popular motive with the Egyptians, since the bending of knees

and elbows can so conveniently be stylized to stress the cubic quality and the seat simplified into a pure cubic form, providing a contrast with the more complicated shaping of the human form which it supports. In Sumerian sculpture a seated figure seldom occurs. When it does, the legs are usually out of proportion and the bend of the knees awkwardly managed. Generally speaking, the artist is out of his element and the result unsatisfactory. Yet the typical standing figure, with its symmetrical cloak or kilt and arms bent at the elbow, is easily adapted to a geometrical shape based on a cylinder or a cone.

The question immediately arises to what extent these distinctive abstract qualities, which, to our eyes, constitute the principal characteristics of the two national styles, were the effect of self-conscious æsthetic considerations. Dr. Frankfort admits that the part played by individual genius in their evolution cannot be estimated, and attributes the preference for one geometric formula rather than another to a "collective æsthetic predisposition." Nevertheless, it is essential to bear in mind the great contrasting conditions under which sculptors worked in these two countries. In Egypt an unlimited quantity of first-rate

stone or marble was easily obtainable, and a sculptor's pupil or the sculptor himself was at liberty to spoil any number of blocks while experimenting or designing in a tentative way. In Babylonia good stone for carving was as rare as metal. Little experimenting could be done, and the "trial-pieces" which are such common finds on most Egyptian sites scarcely ever appear in Mesopotamia. It must have been essential for the sculptor to go to almost any length to avoid a slip of the tool which would spoil the statue; and this in itself may have been responsible for a certain lack of modelling in cases where any further attempt at realism would tend to increase that risk. Conditions such as these are not a fair test of a sculptor's capacity for design, and it is fairly obvious that they are the direct cause of any obvious shortcomings in the very early Sumerian statues.

Similarly one may safely assume that the form in which stone was obtainable must have been the most important factor in determining any geometrical convention such as we have discussed above. In Egypt stone was the normal building material and it was quarried in rectangular blocks. When one of these earliest sculptors was faced with the problem of

carving a statue or a group which would, after all, most likely be incorporated in the architectural scheme of some building, it seems highly improbable that he would select a block of stone to work upon of a notably different shape from those normally used for constructional purposes. All Egyptian architectural elements are cubic or very slightly pyramidal, and there was nothing to divert the sculptor's attention from the motive behind these. In Babylonia, on the other hand, stone had to be imported from neighbouring countries in lumps, as evidenced by the fact that none of these early statues which we are discussing is more than thirty inches high, and the majority much less. The type of lump likely to be selected by a stone-merchant as most suitable for a statue would probably be a rather shapeless oblong, so that it is not improbable that the main formal quality of these statues is dictated by an ignorant merchant's conception of the general shape of a man and therefore of a statue. The exigencies of economy in stone would thus influence the sculptor's ideas of design. We know, for instance, that at the time of Gudea diorite was quarried in Elam and imported into Mesopotamia in the form of boulders. Taking a boulder to imply a less

attenuated shape, we may perhaps assume that the introduction at this later period of seated figures and squat, truncated shapes generally was due not so much to a new æsthetic predisposition amongst sculptors as to a fortuitous change of the form in which their material was available.

To return to Dr. Frankfort's article, he goes on to distinguish between two distinctive styles which apparently belong to two different subdivisions of the Early Dynastic period. Both are actuated by the same primary impulse towards a single geometric unity; yet the earlier style, which is represented by the *câche* in the square temple at Tell Asmar, is characterized by a general stylization of organic forms, including the exposed parts of the body, and to this he attaches great significance. In contrast to this the later group, which can be attributed to a period contemporary with the "royal tombs" at Ur, suggests that the sculptor had become preoccupied with the physical nature of his model, and consequently relapsed into a not always very competent attempt at naturalism.

The first explanation which offers itself of this transition from one style to another is almost disconcertingly simple. For if one

attributes the so-called formal stylization of the earlier group merely to the timidity of a sculptor whose craft was still in its infancy and whose material was in any case too valuable to risk any attempt at virtuosity, yet crediting him with an instinctive eye for a visually satisfactory shape, one may examine every detail of these statues and at once apprehend the mental and technical process which brought it about.

If we are to follow this argument to its conclusion, we must attribute the naturalism of the later style to increased confidence and technical accomplishment, rather than to a lapse of æsthetic feeling for stylization. It should, incidentally, be remembered that by the time of Gudea the experience of something over fifty intervening generations had contributed to the maturity of sculpture generally.

With the exception of these Gudea statues, which need no longer be considered as typically Sumerian, all the finest examples of Sumerian art have been retained in the Iraq Museum; and since it is notoriously difficult to form any useful opinion of sculpture in the round from photographs, the inaccessibility of the originals must put the average art critic at a considerable disadvantage. The field archæologist, on the other hand, during his digging season has this

magnificent collection continually at hand for comparison and study. Every season brings new treasures to the Museum, and year by year the accommodation and arrangement of show-cases have improved under the care and attention of a succession of European Directors of Antiquities.

The first of these, an Honorary Director, was Gertrude Bell, who was at that time doing valuable work in Baghdad as Oriental Secretary to the High Commissioner, Sir Percy Cox. It was, in fact, to her initiative that the founding of the Museum and the inception of the Department were due. At first there was very little money available for the purpose, and only a single room in the Serail could be put at her disposal. But with the progress of excavating work at Ur and Kish the collection began to assume formidable proportions, and soon more commodious quarters had to be found. Since Miss Bell's death Messrs. R. S. Cooke, Sidney Smith, Lionel Smith and Herr Julius Jordan have all had a hand in increasing the scope of the Department, and to-day the plans are being considered for a new national museum of up-to-date character, conceived on a scale worthy of the antiquities which it will house.

The division of archæological finds between the institutions which are responsible for financing excavations and the national museums of the countries in which they take place has long proved an extremely controversial subject. Egypt, Italy, Greece and Iraq have in turn been faced with this problem, and one can but admit that no mutually satisfactory solution has as yet been reached. In Mesopotamia, with an increase of Iraqi national *amour-propre*, it has given rise to a good deal of ill-informed propaganda in the Arab press, which in its turn has called forth a number of indignant expostulations from European and American archæologists. At present the Antiquities' law, originally formulated by Gertrude Bell, still holds good, and this permits of a considerable freedom of interpretation by the Director of Antiquities. If the latter were for any reason actuated by an unreasonable acquisitiveness it would be within his power to make things very difficult for an expedition, the importance of whose finds chanced to be mainly scientific. But since the Baghdad Museum owes its very existence to the work of just such expeditions, it is plainly to her ultimate advantage to show them con-

sideration and exercise a certain leniency, for instance, in the interpretation of the term "duplicate," where only "duplicate" objects are considered suitable to leave the country. This leniency has recently diminished and the number of expeditions in the field has correspondingly decreased.

It is amusing in this connection to remember a reference in one of Gertrude Bell's last letters of the difficulties which she even then encountered in her capacity as Director of Antiquities. The occasion was a visit to Ur at the end of Sir Leonard Woolley's digging season. "We got to Ur in the early morning . . ." she says, and continues, "I had a very busy day dividing the things. Nor was it very easy. I had to take the best things they had got, a small but very perfect statue of the goddess Bau, who presided over the farmyard and has two geese by her throne and two under her feet. As we walked up to Ur the sky was black with geese fighting north and talking as hard as they flew. I felt the goddess had been well supplied with them in her time.

"I relinquished the lovely little head of the moon-goddess which was published in *The Times* and, very reluctantly, I relinquished

two very early plaques showing sacrificial scenes.

“I’m getting much more knowing with practice. I now can place cylindrical and other seals at more or less their comparative date and value, so that I don’t choose wildly according to prettiness.

“The goddess Bau is worth a great deal of money. Lionel [Smith] was so anxious lest we should be robbed of her that he carried her about in his ‘rucksack,’ and I fancy used her as a pillow like a crossed Foreign Office Bag. I took her away when we reached Baghdad, kept in my house for a day and on Sunday deposited her in a safe.”

“Division Day” coming at the end of a hard season’s work will always, under the present régime, constitute a somewhat strained and unpleasant occasion, and doubtless more than one excavator has retired to bed with the feeling that he has encountered his Waterloo. Yet it is inconceivable that the archæologist’s work should not continue in Mesopotamia, where the proportion of ancient sites already dug is so unbelievably small. Throughout the land a thousand nameless mounds rear their heads. For a brief period each spring they are covered with a fine sheen of grass and flowers, but these

soon succumb to the heat of the summer sun. For the god of fertility has descended for the last time "beneath the mountain," and there are no longer Sumerian worshippers to call him back with prayers and sacrifice.

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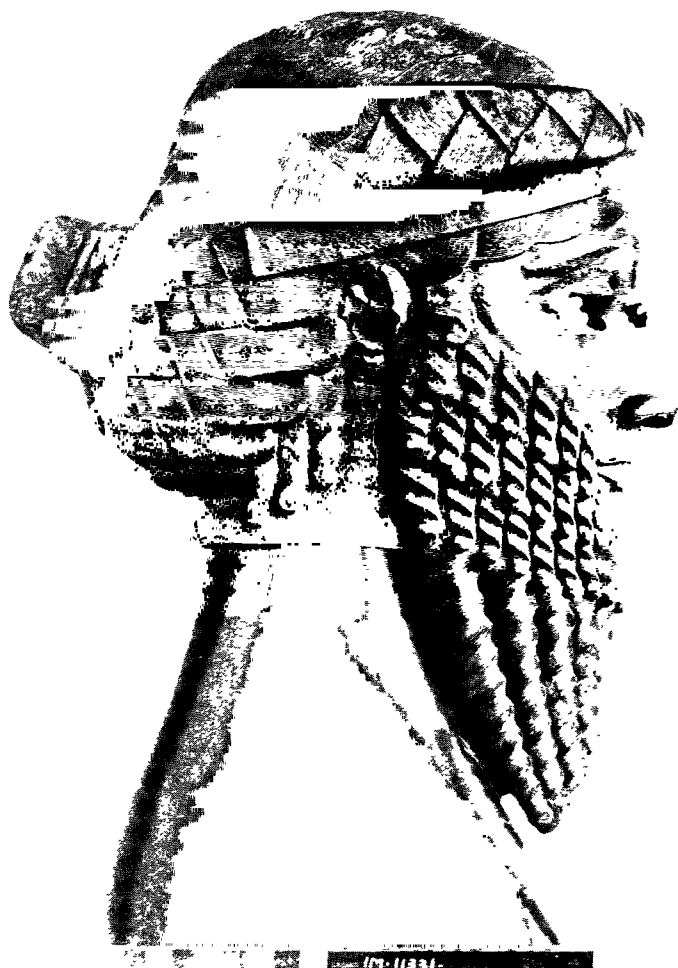
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PLATE I



Magnificent bronze head of the Akkadian period, from Nineveh.

PLATE II



Some details of the hoard of statues from the Abu Temple at Tell Asmar.

PLATE III



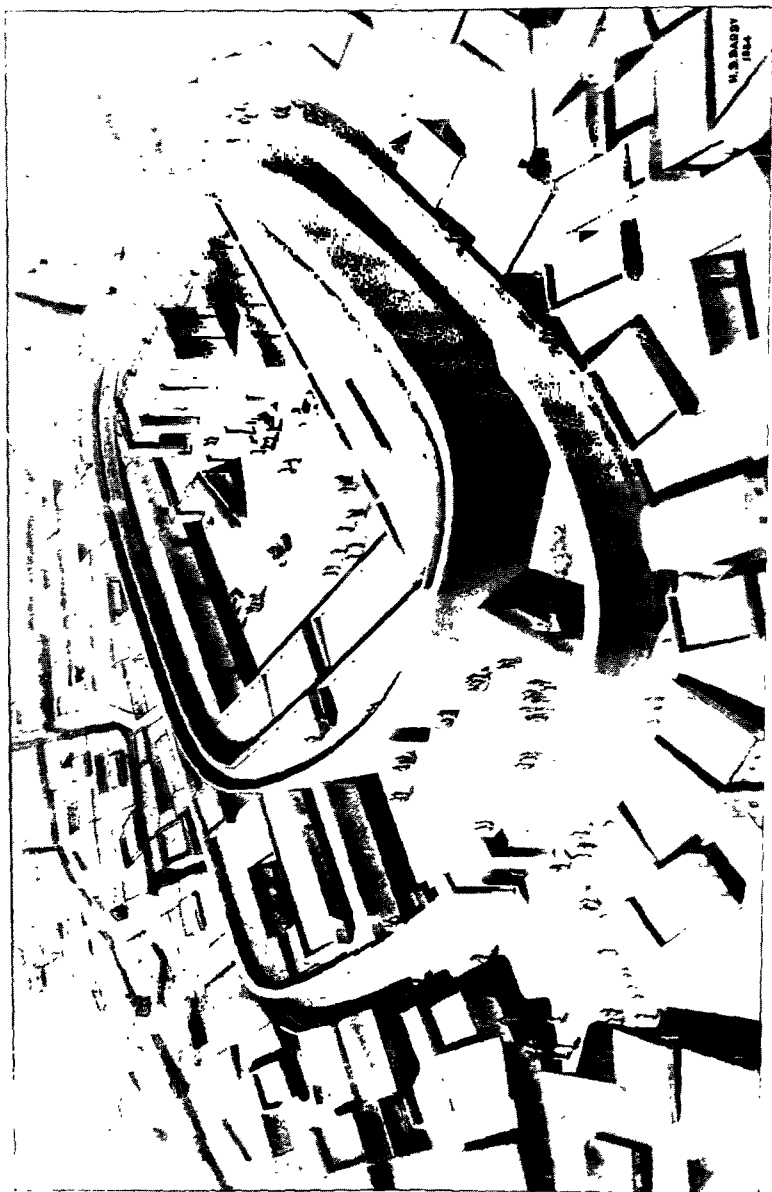
(a)



(b)

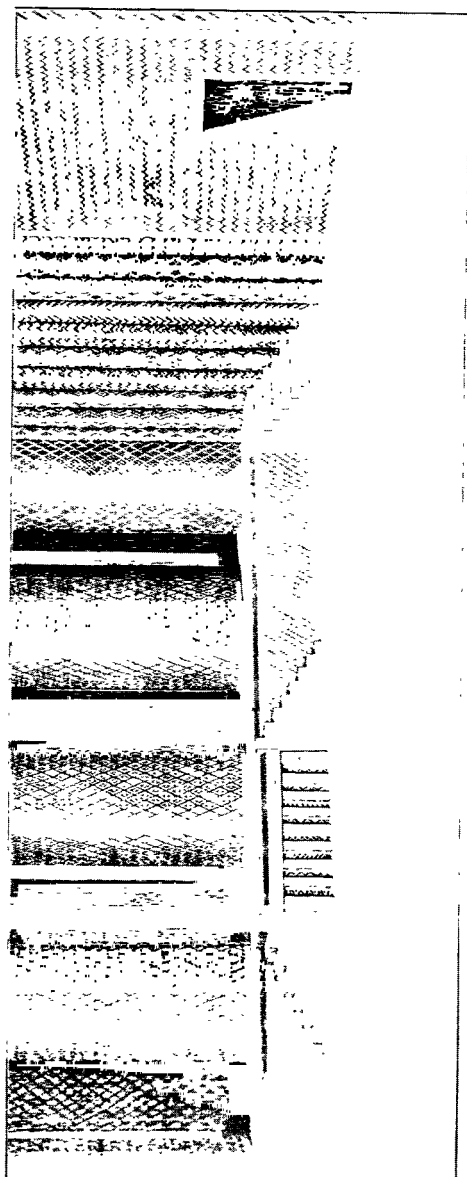
Seals of Jemdet Nasr period.

PLATE IV



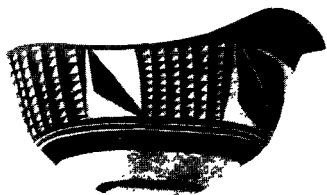
Oval Temple Enclosure at Khafaje, restored by Mr. H. D. Darby.

PLATE V



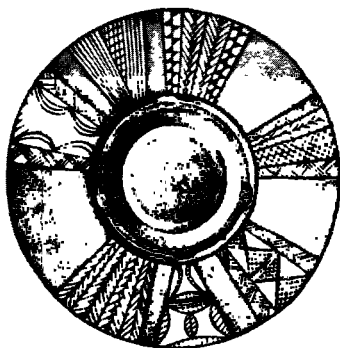
Restoration of mosaic decoration in the "Red Temple" at Warka, by Professor E. Heinrich.

PLATE VI



(a)

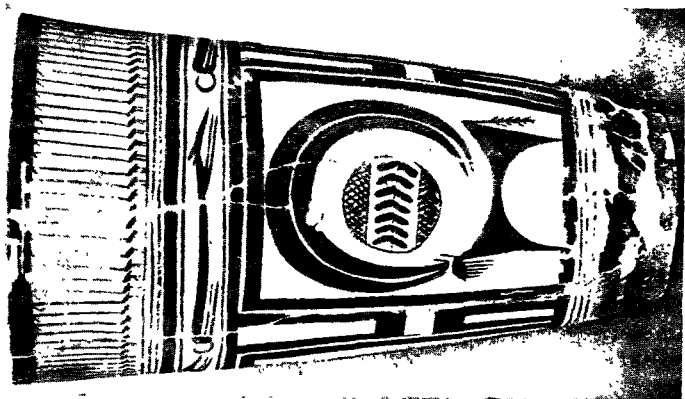
Painted pottery of the Al'U'bad period.



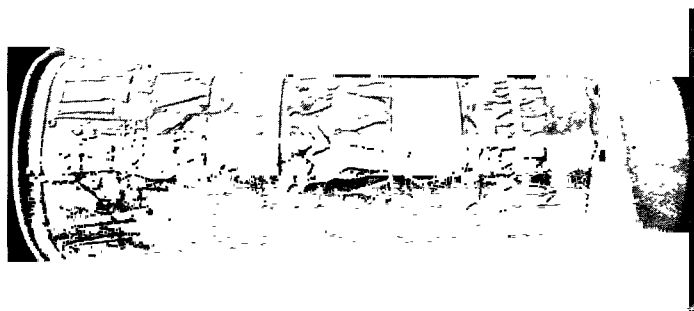
(b)

Painted pot of the Jemdet Nasr period.

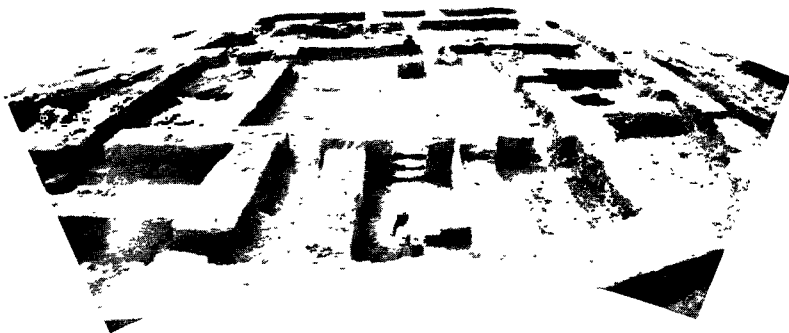
PLATE VII



(b) Painted vase of Susa I period.



(a) Carved stone vase of Jemdet Nasr period, from Warka.



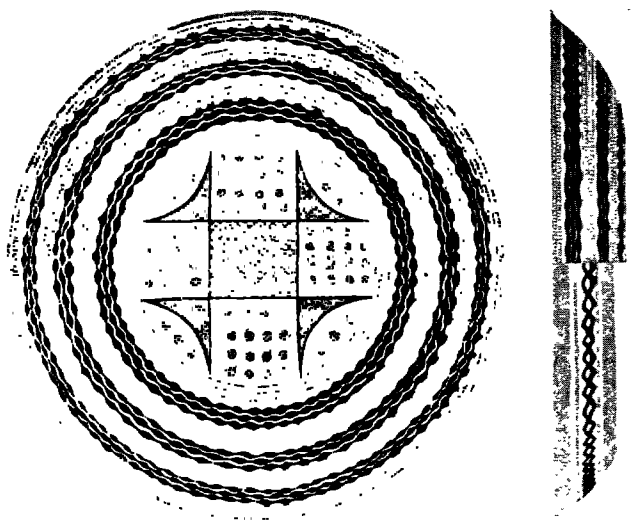
(c)

Composite photograph of a private house of Khafaje.

PLATE VIII



(a)
Carved relief of the Early Dynastic period from Khalafje,
completed with a fragment from Ur.

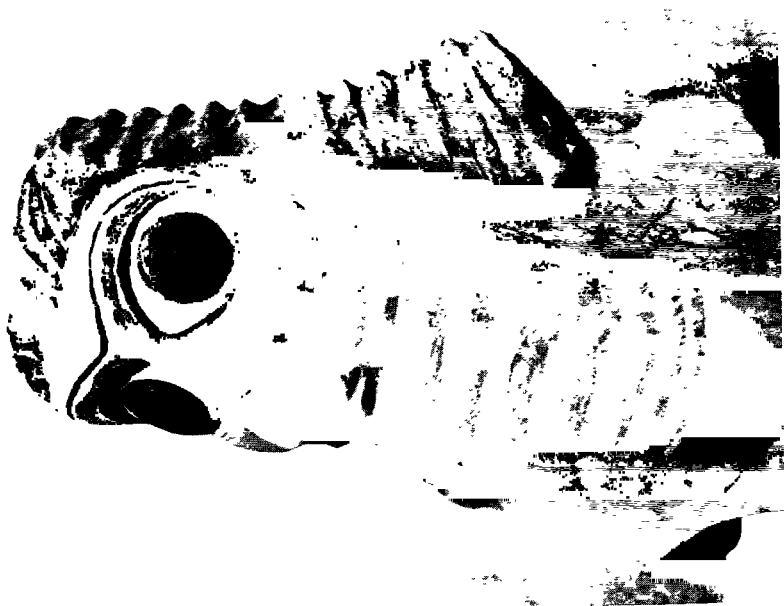


(b)
Painted bowl of Tell Halaf pottery, from Arpachiyah.

PLATE IX



(a) A ritual "wagon," from the Sin Temple at Khafaje.



(b) Head of male cult-statue, from the Tell Asmar hoard

PLATE X



(b) Cockle-shell of gold, from tomb of Shubad at Ur.



(c) Fluted gold cup, from the tomb of Shubad at Ur.



(a) Alabaster figure of a kneeling priest, from the hoard of statues found at Tell Asmar.



Fine cylinder seal of the Uruk period, from Warka.



(a) A typical Early Dynastic seal.



(b) A typical Early Dynastic seal from Ur, showing a Sumerian banquet.



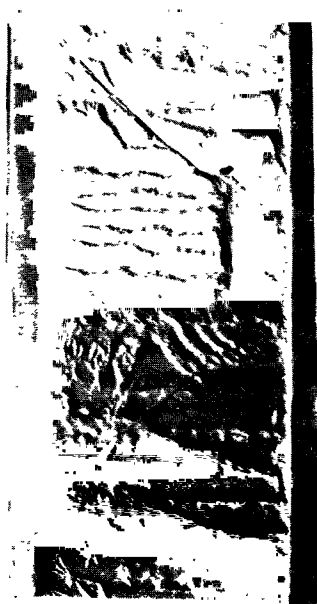
(c) Early Dynastic seal of the "Brocade" type.



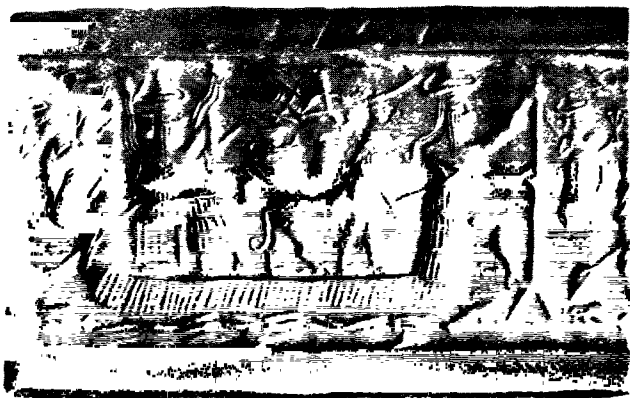
(a) Cylinder seal imported from India at the Mohenjo-daro period.



(b) Akkadian seal depicting the God of Fertility "beneath the mountain"



(c) Seal depicting the slaying of the Hydra by Hercules.



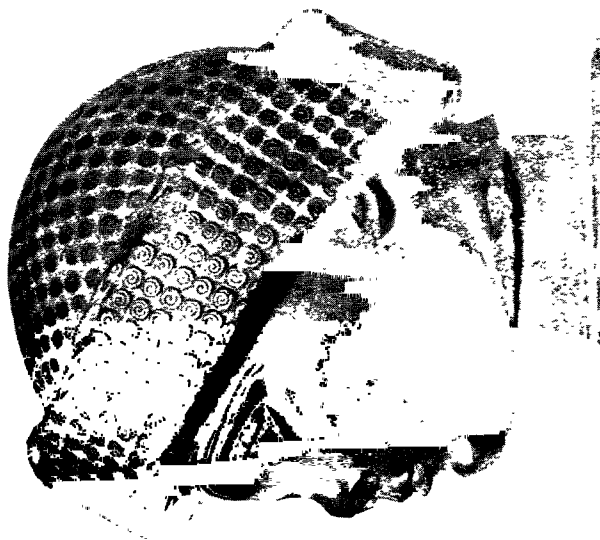
(a)

Akkadian seal depicting the Sun-god in his boat.



(b)

Combat between animals and mythical heroes, in a finely cut Akkadian seal.

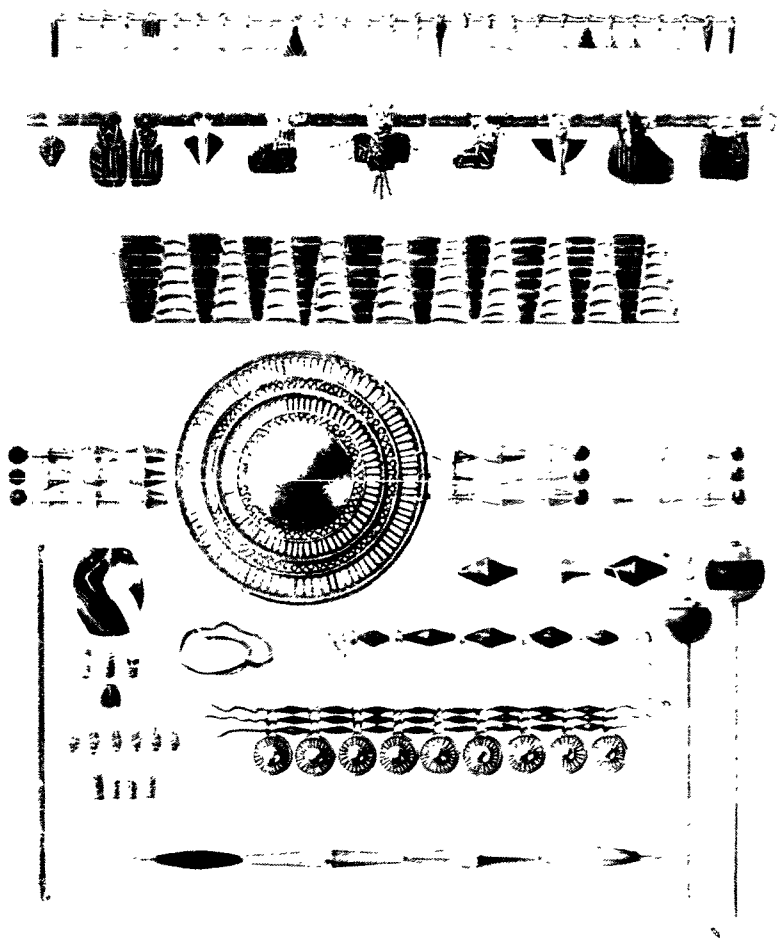


(a)
The "Tête au Turban."



(b)
A Governor of Lagash.

PLATE XVI



Hoard of jewellery, from the Akkadian palace at Tell Asmar.

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